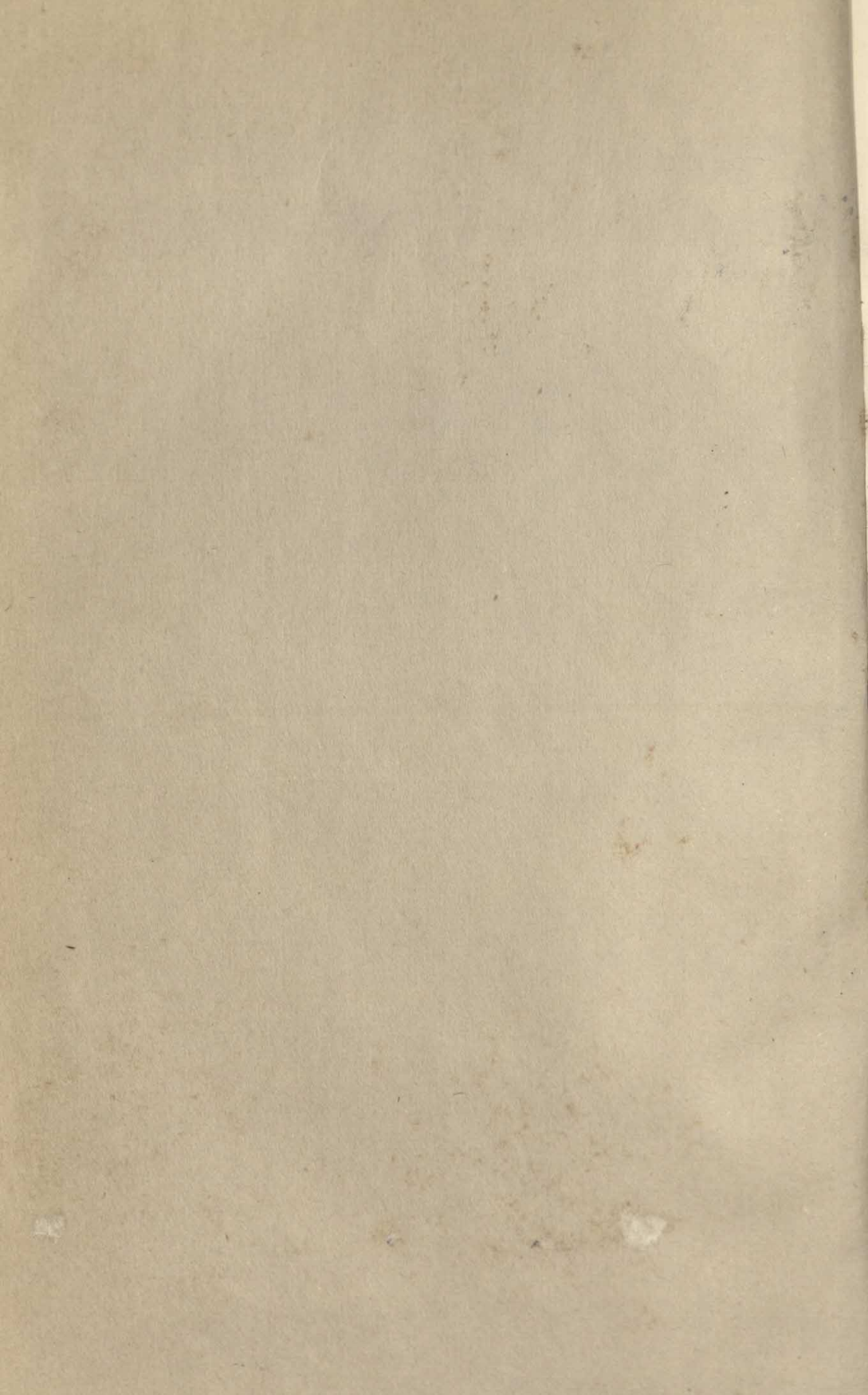


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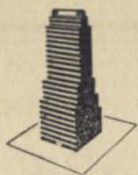
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Foreword

*By education, a professional; by method, an artist; by employment, a public servant. Is it any wonder that the teacher is confused by the ambiguity of his role and uncertain of his status in contemporary America?*¹

THE young man who wrote these lines is a prospective teacher. He might have called attention to many other problems affecting the status of his chosen profession—some of long standing, others reflecting the current scene.

Why the concern over lifting the professional status of teaching to the highest possible level? The goal is crucial. It is to set up conditions which will produce minds and personalities truly fitted for the exacting task of educating our children and youth. Indeed, in one sense education is the key profession in that it provides the foundation upon which the specialized preparation of all other professions must rest.

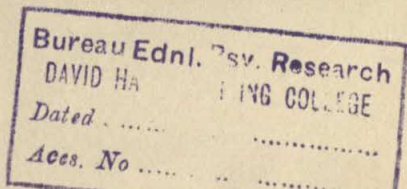
The problem is of course complicated by the present shortage of teachers. When only the most competent should

teach, when every child should have the benefit of skilled guidance in uncrowded classrooms, it has been necessary to recruit personnel with substandard preparation and to adopt other expedients. How can professional status—in the fullest sense of the term—be achieved when professional standards are not met?

Under the stimulus of vastly increased school population at all levels, educational organizations have been joined by lay groups in charting programs to solve current problems and to improve the quality of education generally. Amid this general effort, a central concern has been to raise the professional status of teaching.

In planning this special issue of THE RECORD, the Editorial Board invited official spokesmen of certain national organizations to present statements on recruitment, professional preparation, and financial support. Since each organization has its own primary interests, the writers were asked to include any additional

¹Stuart Selbst, in *Communication Lines*. Newsletter of the Department of the Teaching of English and Foreign Languages, Teachers College. Spring Issue, 1957.



comments which from their point of view seemed especially timely and important.

The following are represented in this issue: the National Citizens Committee for the Public Schools, the National Association of School Boards, the National Farmers Union, the National Association of Manufacturers, the AFL-CIO American Federation of Teachers, the Council for Financial Aid to Education, Inc., the Association of American Colleges, the Association of American Colleges of Teacher Education, and the National Commission on Teacher Education and Professional Standards of the National Education Association. Many other groups with equal regard for education could have been asked to participate, but obviously it was impossible to sample the opinions of all.

The writers show no disposition to equate "professional status" with the teacher's standing in the community. They are dealing with the qualifications of a profession, and with the steps by which education may attain these standards. They are thinking in terms of long-range planning.

The reader will find emphatic agreements and equally vigorous disagreements. There is consensus, for example, that the impetus for achieving higher

professional status must come from the teaching profession itself; the job cannot be done by laymen working on behalf of teachers. Some of the cleavages represent issues on which there is bound to be much discussion: merit-based salaries, taxpayer demands for economical school-buildings, the use of television for large-group instruction.

By design, three of the nine articles deal with higher education. The college professor is not only the instructor of educated laymen, he is also the teacher of prospective teachers and a leader in the continuing education of teachers in service. Thus the problems of higher education have special pertinence to our discussion.

Anyone who reads these pages cannot but be impressed by the keen interest of these representative and influential components of our society in securing the best possible teachers for our children and youth. Equally significant is the concern exhibited by the profession itself that its members recognize the importance of their task, and acquire the arts and skills, the understandings and knowledge for the best interests of the individual learner and of society.

FRANCIS SHOEMAKER
MAX R. BRUNSTETTER

Now Is the Time . . . *

HENRY TOY, JR.

PRESIDENT, NATIONAL CITIZENS COUNCIL FOR BETTER SCHOOLS

I AM a layman invited to speak to the teaching profession on the highly technical question of professional status of teachers. Certainly I'm not expected to look at the subject from a technical point of view. Members of the profession are far better qualified to do that. What must be expected of me is an overview of the question, a look at it from the outside.

As a layman, I am perhaps expected to say that laymen can do a great deal to raise the status of teachers. They can, and they are doing it. They are helping improve the climate in which teachers work. They are recruiting top students to enter teaching. They are working to improve salary schedules. They are striving to make teachers truly an integral part of their communities. And all of this is to the good. But I submit that these things, singly or combined, are the periphery. The center of the problem rests with the teaching profession itself.

Therefore, what I can do in this short space is raise some questions, report some trends, and describe the arena in which the battle will be fought in the next few years. My qualifications for doing this are

* Mr. Toy was special assistant to the chairman of the White House Conference on Education. He is author and commentator of the Westinghouse Broadcasting Company's weekly radio education news program, "Spotlight on Schools," and is publisher of the newspaper *Better Schools*.

based on the thousands of talks I've had with laymen about our schools.

WHO IS IN THE TEACHING PROFESSION?

Teaching is a mass profession today, with more than a million and a quarter men and women making their living in education. There isn't another profession that touches it for sheer numbers. There are about 200,000 doctors, even fewer lawyers, and some 100,000 dentists. But the doctors, lawyers, and dentists have taken tremendous steps in insuring competence and in screening members of their professions. Most important of all, they've taken initial steps themselves. They have cooperated fully with laymen, so that the standards were not imposed on these professions from the outside.

Unless the teaching profession can take similar self-policing steps, my guess is that it stands in grave danger of having the steps taken by outsiders.

But it's much more difficult for the teaching profession because of factors that set it apart from other professions. First of all, a young medical student who goes into internship has made a once-and-for-all choice of a profession. It is rare to hear of a doctor who changes his profession. It's getting rarer to hear of a teacher who doesn't! A large percentage of the teaching profession is made up of young women who never expect to make teach-

ing their career. They hope to teach as a stopgap before marriage. To a lesser degree, this is true of the men entering teaching, many of whom today are using teaching as a steppingstone to a job in industry. The turnover in teaching every single year is nearly 10 per cent. Despite the competence and conscientiousness of many of these short-term teachers, they are not professionals and they don't stay in the field long enough to become professionals.

These nonprofessional members of the teaching profession, therefore, seem to be pushing the entire profession in a direction that guarantees short-term gains rather than long-term status. It is only natural that a teacher who expects to teach about five years would advocate a salary schedule which carries a maximum that can be reached in five years. I say it's only natural; I do not say it's professional.

Here, then, is a high priority job for the teaching profession: define the profession more clearly in terms of the truly professional career teacher.

WHAT HISTORY DOES THE PROFESSION HAVE?

Among the many reasons I have for believing the teaching profession itself can assume full responsibility for raising its professional status is the brilliant history it has already had in this regard. Look at this capsule trend which is the result of efforts by the teaching profession working practically single-handed:

Ninety years ago elementary school teachers (fewer than 200,000 in all) rarely had any education beyond that acquired in the schools in which they taught.

Fifty years ago not more than 20 per cent of all teachers (there were about a half million) had any special training for teaching.

Forty years ago one-third of all teachers (under 700,000 total) had no more than two years of education beyond the eighth grade

and half of them had no more than four years.

Twenty-five years ago, when there were about 850,000 teachers, most teaching certificates were still issued at the local and county level, which meant few standards were maintained or enforced.

Twenty years ago there were about 875,000 teachers, but a quarter of the states required only high school graduation or less for elementary teacher certificates.

Today state certification laws require college training ranging from one year to four years, with a bachelor's degree, as a minimum for the well over one million classroom teachers.

The profession has consistently raised certification standards, which helped to increase competence in the profession and helped to keep incompetents out. There have been better supervision and in-service training of teachers, both of which combined to raise standards. The profession has done much to remind the public of the importance of teachers and to make laymen aware of the undeserved low status and pay accorded teachers. It has also increased the security and bargaining position of teachers.

But many recent actions have been aimed at benefiting schoolteachers rather than education as a whole. The hope, undoubtedly, was that what benefited teachers benefited children. But in reality this approach toward professionalism is not necessarily valid. Laws and requirements to protect and improve the security and position of the small core of professionals are always going to protect and improve the security and position of the large fringe of nonprofessionals and the small proportion of the truly unfit.

I find this point of view not only among laymen but among members of the teaching profession. Here is how George E. Carrothers, Professor Emeritus of Education, University of Michigan,

put it in the May 25, 1957, issue of *School and Society*:

Teachers, by and large, have not developed superior teaching methods, nor have they developed means to show clearly to parents and boards of education the distinguished work of master teachers. We have not been willing to stand as a profession to proclaim the work of outstanding teachers and to insist on deserved recognition and reward. Rather, we have been willing to join others in pressure organizations for the securing of the single salary schedule, with little regard to teaching effectiveness. At the present time, our profession as a whole discourages merit recognition of effective service. Nothing could be more disheartening to ambitious young men and women entering the profession imbued with the desire to become masters in their chosen fields.

NEW IDEAS IN TEACHING

Let me dispel quickly any mistaken idea that this is going to turn into an impassioned plea for merit pay. But let me add that the teaching profession's flat statement that merit pay is impossible is unacceptable to the general public in its new maturity. In fact, the profession's rejection of many new ideas is causing it to lose status at a time when it's wondering how to gain it.

The record of the last few years belies the teaching profession's long history of being in the vanguard of the movement to modernize education. Practically every effort toward change in the organization of teaching that does not follow the traditional pattern is turned down, sometimes seemingly without a full hearing. There are four outstanding examples at hand today.

1. *Educational television.* I have sat in on meetings where members of the teaching profession have derided it, belittled it, laid plans to fight it. I have yet to sit in on a meeting where teachers are

looking at the facts and talking about ways to harness it.

2. *Teacher-aide programs.* From personal contact, I can report that teachers, by and large, have said the programs wouldn't work *before* they saw them in action.

3. *Merit pay.* Almost to a man, the professionals I meet tell me it's impossible to pay a teacher according to his ability, and that laymen are out of order in bringing up the subject.

4. *Teacher preparation.* A fourth case concerns the highly complex question of teacher-education programs. Although not so noticeable today as a few years ago, the unwillingness of the profession to re-examine the curriculum in teacher preparation has caused considerable ill will. (Admittedly the teachers of teachers were by no means solely to blame in this case.) But much professional prestige was lost before the critical interest of laymen and liberal arts institutions was accepted as having a valid place in the educational picture. With the increasing cooperation among all parties concerned, one roadblock to professional recognition is being removed.

Perhaps none of the first three examples has anything to offer to education and all should be discarded. I don't know, but I'd like to see all three—and many more—ideas get a fair trial. What is preventing a fair trial and confusing the public in the bargain is the profession's attitude toward these experimental programs. Instead of a positive effort to explore the potential of each, the effort has been to discourage any experimentation.

AN ANALOGY

Spokesmen for the teaching profession are quick to compare it with the medical profession. I think this is a doubtful comparison for many reasons not pertinent

here, but I'd like to use the profession's own analogy to make a point.

In comparison with fifty years ago, the medical profession, working with 40 per cent fewer doctors per thousand population, gives better medical service to more Americans. At a time of severe manpower shortages, any profession—including teaching—should look behind that statement for the reasons. Here, I think, are some of them:

First of all, a comprehensive study was made of medical education and the recommendations of that study were put into action.

Second, the profession itself was reorganized, largely through the efforts of a layman, Abraham Flexner.

Third, the medical profession encouraged experimentation in related fields, such as biochemistry, which resulted in wonder drugs and other medical tools.

Fourth, the profession built within itself subsidiary professions to save the valuable time and skill and knowledge of the top man.

Fifth, the profession set up rigid standards for its members. And last, the profession explained to the public, step-by-step, what it was doing and why.

I offer those steps to any profession now looking at itself critically. Where the steps are being taken in other professions and organizations the results are uniformly excellent.

THE DEMAND FOR QUALITY

Earlier I mentioned the growing maturity of the general public working on school problems. The citizen's increasingly important role enters into any discussion of teaching because the citizen, sometimes more than the professional, accepts the teacher as the most important factor in the education of his children.

To the eternal discredit of the average

citizen, for a long, long time he didn't care whether school kept or not. He was pretty sure it would keep because there was a high percentage of dedication in most teachers. But the efforts of teachers to improve themselves went unnoticed. So did experiments in education, largely initiated by the teachers. So, strangely enough, did the miracle of universal education happen without fanfare.

Everything seemed to be going so well when the bubble burst. Suddenly, every problem was a crisis and the citizens who hadn't bothered to take any interest started blaming the professional educator for all of the things that were wrong.

But, to condense the story of a stormy decade into a sentence, the faultfinding gave way to factfinding and the community's schools became a partnership operation, with laymen and educators working out their problems together.

The first problems were tangible ones: count the children, buy the bricks, raise the salaries, pay the bill. In the process of solving those problems, which were monumental in many districts, the citizens learned a lot. Not the least of what they learned was a new respect for the professional, this time based on facts and not sentimentality. The few headline cases of citizens meddling in method were enough for most citizens' committees to learn that there were some things better left to the professionals. And the bitter results of refusing to work with the citizens were enough for most professionals.

With his new knowledge and his sparked interest, the citizen in the past year or so has become concerned with the intangibles of education. Part of this concern has been induced by America's world-leadership role. Whatever the reasons, he now is sure that the children in today's classrooms are going to have to learn more, learn faster, and learn better.

In other words, the citizen today wants quality education.

This can be reduced to a syllogism:

The teacher is the most important single factor in education.

Education must be of a high quality.

Therefore, high quality teaching is essential to education.

WHO DOES WHAT?

If citizens' committee leaders and professional teachers are in agreement that high-quality teaching is the nub of the problem, who is going to take the lead in getting it?

As a leader of a layman's organization, I hope that laymen will not have to take the lead.

This does not mean that the citizens don't have jobs they can do and do well in this area but theirs are peripheral jobs. Citizens' committees should continue to help recruit the best possible people for the profession, but the teachers should make sure that it's the best possible profession. Citizens should continue their willingness to foot the bill for professional salaries, but teachers should see that those salaries are paid for quality teaching. Citizens should continue to make

their hopes for education known, but teachers should find ways to achieve those goals competently and quickly. Citizens should suggest possibilities for the transmission of knowledge, but teachers should test those possibilities in the crucible of honest research, rejecting the useless and putting the useful to work.

The new determination of citizens demanding quality education means to me that they intend for the schools to provide it. They want the profession to take the lead, but if the profession fails to do so laymen will move into the vacuum. I think it would be unfortunate for this to happen.

If I read the barometer of citizens' interest correctly, there is little time left for theoretical discussion. Now is the time for the teaching profession to reconcile the nightmare of quantity with the dream of quality, to demonstrate the strength of dynamism over traditionalism. Those important battles will be fought in the profession's own arena with the true professional writing the rules.

In the growing cheering section there are already well over a million informed citizens who wish the teaching profession well.

School Boards Look at the Teaching Profession*

W. A. SHANNON

EXECUTIVE DIRECTOR, NATIONAL SCHOOL BOARDS ASSOCIATION

THE ideas and opinions expressed in this article are those of the writer and do not represent School Board Association policy, unless specifically identified as such. It is my understanding that the editors of this special issue of the *Teachers College Record* want its contributors to look ahead rather than to dwell too largely on the past. That I shall try to do, attempting to describe certain trends that are becoming evident and a few which are not so evident but are, in my opinion, definitely appearing.

SOME FUNDAMENTAL PRINCIPLES

If there were no children and youth to be educated, there would be no need for teachers, administrators, school boards, and school facilities. Therefore it is pertinent that all professional action taken by persons connected with the public schools should be in the best interests of the majority of those whom the schools are designed to serve.

* Prior to Mr. Shannon's appointment as executive director of the National School Boards Association, Inc., he had been a teacher, principal, county superintendent, and executive secretary of the Tennessee School Boards Association. He was co-chairman of a study (1951-54) of "School Boards Leadership" initiated by the Southern States Work Conference at Daytona Beach, Florida, and helped to prepare the printed report.

Since education is a complicated and massive business, it is obvious that boards of education, although usually composed of outstanding lay citizens, do not have the time or the preparation to operate and manage the schools. It is therefore essential that they select and employ a specialist for this purpose. The most important function of a board of education is the selection of the superintendent of schools, who becomes its administrator or executive officer. The board operates as a corporate body in the adoption of basic policies governing the conduct of the schools. Often these policies are recommended by the superintendent, but ideally they are adopted by the board only after thorough discussion with all those whom the policies will affect, to the end that they may meet most effectively the specific needs of the local school system. Once adopted, board policies are executed by the superintendent and his staff.

In the employment or dismissal of teachers and other school personnel a board should act upon the recommendation of its superintendent. It need not always follow his first recommendation; if discussion brings new facts to light, the board may properly ask the superintendent to restudy the matter and bring in another recommendation. But the board should never arbitrarily go over the head

of the superintendent in connection with school personnel. To do so would quickly undermine morale and destroy that team spirit which a good administrator seeks constantly to build in his staff.

On the other hand, in recognizing teaching as a profession, the board has a right to expect that teachers will conduct themselves in a professional manner, holding to standards worthy of emulation by the young people whose leaders and mentors they are. This does not mean the imposition of artificial or unnatural restrictions upon teachers as a group, but rather the encouragement of wholesome, friendly, and genuine characteristics and attitudes which will bring to the teaching staff the respect and admiration of all right-minded persons in the community.

Public schools do not belong to boards of education; neither do they belong to the educational profession. Rather they belong to all the people of the community who pay the taxes to support the schools and who supply the children to be educated. Sometimes this fact is forgotten by board members and by professional educators, with unfavorable results.

Moreover, school boards must expect to meet pressures from numerous groups and individuals in the community. It is their responsibility to listen to all desires and complaints and to decide what action must be taken in the best interests of the total community. In short, it is the school board's responsibility to provide leadership for the many facets of the community which will promote generous moral and financial support of the public schools.

TEACHER RECRUITMENT

Basic Policy Number 8 of the National School Boards Association reads:

The National School Boards Association with its affiliated state associations urges local boards to exercise the utmost vigilance in maintaining and improving the professional status of the teaching profession, and in encouraging the type of potential candidates for teaching who will exemplify the high ideals so needed in the world today.

School boards are coming to recognize that they have a responsibility in the area of teacher recruitment. Since their schools depend for successful operation on well-qualified teaching staffs which are drawn from the current supply of certified professionals, an equal or greater number of potential teachers should be recruited from each community than are currently teaching there.

We have learned that aptitudes for teaching can be identified in children quite early, even in the elementary grades, and that their teachers are in the best position to guide and encourage these boys and girls to consider teaching as their career. Many a young person has entered the teaching profession because of the influence of an able professional teacher somewhere along the line.

Boards and their administrators can do much to adopt and carry out policies that will provide better systems of guidance and follow-through during the elementary and secondary years. Such guidance, when competently handled, is fruitful and will lead to the discovery of a certain percentage of the students who will successfully enter and continue in the teaching profession.

Boards also recognize that the attitude of parents toward their children becoming teachers is of great significance, and should do whatever they can to influence parents of potential teachers to encourage their children to choose a career in teaching. Communities in which boards have established for the teaching staff high standards of qualifications, salaries, and

prestige are much more fertile fields for recruiting new teachers than are communities in which the opposite conditions exist.

This is a day when scholarships are in vogue. I wish to point out, however, that there are dangers which should be guarded against. This nation became great because our youth were taught to struggle for worthy goals and high ideals. When aims are too easily reached, it is human nature to hold them in low esteem.

TEACHER PREPARATION

The school boards of the nation, through the National School Boards Association, wholeheartedly support the National Council for Accreditation of Teacher Education "as occupying a position of strategic importance in the long-range upgrading of the teaching profession."

It is recognized that high standards should be maintained by institutions of all types engaged in the preparation of teachers. The functioning of a national agency for accreditation brings closer the day when there will be greater reciprocity than now exists among the states in the certification of teachers. In other words, a teacher prepared at an accredited institution in any state would be eligible for certification in many or all states. Such a condition would have many advantages not only for the teacher but for administrators, school boards, and state departments of education as well.

A large segment of school board members have a feeling that there is a good deal of wasted effort in the preparation of teachers. Many teachers readily admit that some of their educational courses are juvenile in content. Some materials and methods courses are essential, but it would seem that colleges of education in general have fallen into a rut of much theory and

methodology and little subject matter and practice teaching. Might not a better teacher-preparation program be built on longer periods of internship under competent supervision? Moreover, the extended use of practice teachers would not only strengthen their professional preparation but also serve to ease the load of many of our most experienced teachers who are handicapped by oversized classes and an excess of routine duties.

The teaching staffs of many colleges and universities have been depleted by business and industry. Therefore, I propose that business and industry contribute funds to the colleges, especially for salaries of the instructional staff. In other words, I believe money should be given to the colleges preparing *elementary and secondary teachers primarily for the upgrading of their instructional staffs rather than as scholarships for students. Any institution gaining a reputation for having a strong, dynamic staff fully alive to the practical requirements of public school teaching will speedily attract more students than it can handle.*

TEACHER—ADMINISTRATOR— BOARD RELATIONSHIPS

Policies with respect to school personnel are perhaps the most important which school boards have to make and school administrators to carry out. Upon the fairness and impartiality of such policies depend the morale and team spirit of the school staff.

Boards should pay salaries commensurate with the financial ability of the community, state, and nation, and in accordance with each teacher's demonstrated success in motivating, encouraging, and developing children and youth. No investment will bring greater returns to the community than salaries which will attract and hold top-quality teachers and

reduce turnover to a minimum. If this principle were followed, some teachers today would be receiving from \$12,000 to \$15,000 annually, while others would receive not more than \$2,000.

Many boards believe in what is generally referred to as "merit rating," which makes it possible for career teachers of superior ability to be given recognition and rewards commensurate with their accomplishments. Notwithstanding the difficulties involved and the reluctance of the teaching profession to endorse the merit principle, American taxpayers are beginning to insist that their boards of education find some workable means of putting into effect this fundamental concept of rewarding workers in all fields on the basis of their individual efforts and contributions.

Another area which school boards and the teaching profession need to study and discuss jointly is that of teacher tenure. Most boards recognize that continuing contracts for teachers is an acceptable principle and one that can be carried out with benefit to both teachers and pupils. But they are inclined to feel that tenure should not be a part of a profession's goal. Teachers should assume leadership in removing this nonprofessional restriction from state codes.

It is acknowledged that failure of some school boards to understand their duties and responsibilities toward teaching personnel has helped to make tenure laws popular among the profession in many states. The efforts that board leaders everywhere are now making, through their school boards associations, to upgrade their ranks and to make sure that lay members of school boards shall quickly be oriented into proper understanding of their functions, should greatly reduce the misuse of authority in the future.

Teachers would be well advised to take a long look at the total effect of tenure laws and to work with school board officials toward some sounder means of protecting the qualified teacher if protection seems needed.

Related to the problem of tenure are such matters of teacher welfare as leaves of absence, sick leave benefits, and an adequate and sound retirement program. For too long the teaching profession and school boards have reacted separately to these problems instead of working them out together in the best interest of all concerned, including the children and adults of the school districts. My belief is that fair and full discussion will lead to fair and reasonable solutions in all such matters, and that far more *joint* consideration should be given to these problems in the future.

There is little doubt that in far too many instances school boards have not given teachers adequate facilities, equipment, and instructional materials. This is an area in which a small increase in the investment would rapidly pay big dividends. Teachers should always be consulted regarding their needs for the "tools" of their profession, and should be given as nearly as possible what they desire to insure effective teaching. In this connection, a whole new and rather more expensive category of equipment is opening up in the many audio-visual aids that are being offered to schools. Special effort needs to be made to understand the uses of such equipment and to relate its installation to local curriculums, personnel, and plant. I urge that boards consult their teaching staffs about these new facilities and as soon as practicable provide for their use. Beyond question they will be an important factor in educational programs of the future.

There are many other areas in which

the teaching profession (including school administrators) and school boards should work together for their mutual benefit and for the welfare of the community. Without going into detail, I might mention provisions for such matters as inservice growth, distribution of teaching load, assumption of extracurricular responsibilities, relation between the school and the public concerning such issues as reporting student progress, and freedom to teach without fear of unjust criticism or reprisal.

TRENDS IN PUBLIC EDUCATION

Partly because of an enhanced reputation for good citizenship attributed to individuals who now serve on boards of education, better qualified business and professional men and women are accepting this responsibility. School board members, in general, are better informed concerning their legal and moral obligations than ever before.

The intrinsic values of state and national associations of school boards in providing opportunities for orientation of new school board members; discussion of problems involving buildings, personnel, transportation, curriculum, and finances; and having specialists in all educational areas provide the latest information on research have greatly improved our public schools.

Although a majority of the states have enacted tenure laws, pressure is building up in many communities against tenure, partly because of dissatisfaction with many neurotic, poorly trained teachers.

Members of boards of education and superintendents are beginning to recognize the demands of taxpayers for more economical and efficient buildings and services. One form taken by these demands is an increase in the number of bond issues which have been defeated

by referenda during the current year.

The need for more classroom space to accommodate unprecedented numbers of children in communities already heavily burdened by debts and taxes is causing many urban boards of education to explore the possibility of organizing their school program on the quarterly basis, with students attending three out of four quarters annually. This plan will supply from one-fourth to one-third of the classrooms usually needed, increase the salaries of teachers by one-fourth provided they teach four quarters, and reduce the number of additional teachers needed.

Although the trend toward using teaching assistants or aides is not developing rapidly, greater interest in this program is manifested each year.

Willingness of more and more communities, school systems, and teachers to participate in research studies and educational experiments is heartening.

The expenditures for instructional materials, including maps, globes, textbooks and library books, projectors, films, screens, and countless other items are enormous but are considered worth-while if these resources are properly used. The trend is to increase expenditures for these teaching materials. Many schools are beginning to use educational TV, and this innovation is expanding rapidly.

Education associations in many states are welcoming the leadership that school board associations and other lay groups are developing in the field of promoting state financial support for the public schools.

Education associations are becoming more professional. For example, the Kansas State Teachers Association will accept as members only those teachers who are fully certificated.

Local communities are becoming concerned about education beyond high

school. Many community or junior colleges are being discussed, planned, and built. In most states the local boards of education are providing leadership in this endeavor. In a few instances, however, state colleges and universities are extending their scope and influence into the junior college area.

Demands are being brought to bear on the legal authorities at all levels, by parents and other taxpayers, for basing teacher compensation on merit.

Thousands of teachers are now employed for twelve months, with ten months being the minimum in most states, rather than from six to nine months as was the custom two decades ago.

The sharp line once drawn between church and state in education seems to be disappearing. Public money is now being used in church schools for school lunches, textbooks, teachers' salaries, transportation, and even buildings.

During the past quarter century, many additional responsibilities have been passed from the home, church, and community to the public schools. The pendulum is now swinging to the right and many duties, responsibilities, and even subjects are being eliminated from the school program.

An urgent demand for adult education is evidenced in most communities. In those school systems meeting this challenge there are as many students in night schools as in day schools.

There is a growing desire to recognize and reward outstanding teachers. This is evident in thousands of our communities as well as at the state and national levels. Many teachers are worthy, dedicated people performing services beyond the call of duty. Giving recognition to our most capable teachers will help to build a stronger America by better education of youth in each local community.

Manpower Problems in Rural Schools*

JAMES G. PATTON

PRESIDENT, NATIONAL FARMERS UNION

THE problems of public education which beset the nation as a whole are even graver in rural areas. Rural people have more reason to be concerned about recruitment, training, and financing of teachers in the coming years than their urban cousins do.

Rural America has more than its fair share of children. For the United States as a whole, the average family size is 3.12 persons. The average rural farm family size is 4.04 persons, according to 1950 Census figures.

The age composition of the farm population differs from that of the urban population in that it has fewer people in the working ages (fifteen through sixty-four) and relatively more young and old people. This situation is due in part to the higher fertility rate among farm people, but the problem is greatly intensified by the steady migration of working-age rural people to the cities, leaving a disproportionate burden on the remaining working-age people for the education of rural farm youth.

Rural areas have been hardest hit by the accumulating shortage of teachers

over the past two decades. A few years ago the National Education Association estimated that 80 per cent of this shortage is in rural sections. To make matters worse, there is a larger proportion of inadequately trained teachers there than in urban schools. Two-fifths of the rural teachers have had less than four years of college, compared with less than one-fourth for the nation as a whole.

Unless some drastic action is taken, the situation is likely to get worse. Of the bumper crop of babies expected in the next decade (well over four million a year) at least one-third will be absorbed in rural schools. The migration of working-age groups from rural areas is expected to increase in view of the farm depression of the past four years. This will leave the remaining working-age people in rural areas with an even more disproportionate burden of young people to educate.

In addition to the teachers needed to make up the accumulated shortage and to replace unqualified teachers, more than 40,000 extra teachers will be needed each year in rural schools to take care of increased enrollment and to replace drop-outs (teachers who marry, retire, move to better-paying jobs in industry, and so on). Altogether, it is estimated that half a million trained teachers will be needed in rural areas during the next ten years.

* Mr. Patton is Vice-President of the International Federation of Agricultural Producers, and was Chairman of the National Farmers Union Commission on School Support in Rural Areas, which produced the document "Remedies and Resources for Rural Schools."

THE RECRUITMENT PROBLEM

There are two major stumbling blocks to recruitment of adequate numbers of teachers: lack of incentive, and lack of opportunity for training.

Lack of incentive is perhaps the graver problem because it affects not only the recruitment but the retention of teachers. Too many trained teachers leave the profession for better-paying jobs elsewhere, too many graduates trained for teaching abandon their careers before they are well started, and too many capable young high school graduates do not give a second thought to entering the teaching profession.

We cannot, and should not, count on "dedication" to motivate young people to enter and remain in teaching. We must provide proper incentives. Farmers Union members, particularly, understand this problem because family farmers have been struggling for parity of income with other groups for over half a century.

Both the teacher and the family farmer are entitled to incomes on a par with those earned by Americans in other walks of life for corresponding effort and ability. The average salaries of all public school teachers (like the incomes of family farmers) are far below those earned in other professions or in manufacturing.

If there is little to attract young people into the teaching profession in the nation as a whole, there is even less to attract them to rural areas. On the average, rural school teachers are paid almost a thousand dollars a year less than urban teachers.

Related to the amount of salary is an incentive program by which teachers' salaries may be advanced year by year on a regular schedule. A far smaller proportion of rural teachers than of teachers in urban school systems work under fair salary schedules.

In addition to low salaries, and the absence in many places of long-range salary incentives, there is a greater degree of job insecurity in rural areas. Few of the rural farm states provide state-wide tenure, particularly for rural districts.

Another aspect of the incentive problem is tied in with the problem of the shortage of classrooms. The teacher is as much affected by overcrowded conditions and inadequate physical facilities as are the children. Since the problems of accumulated shortage and the obsolescence of schoolbuildings are more acute in rural areas, they are yet another deterrent to recruiting and retaining qualified teachers for rural schools.

Poor living conditions also make teaching unattractive in rural areas. Not only are many conveniences lacking, but often there is little privacy.

The other stumbling block to improvement of the quality of teaching in rural schools is the lack of opportunity for higher education of rural youth. Naturally, rural schools expect to recruit new teachers from the rural population. This is reasonable because a teacher brought up in a rural area is closer to, and understands best, the problems of rural children, and also because it is extremely unlikely that a teacher accustomed to urban conveniences and customs would be attracted to rural areas.

In spite of poor incentives, a large number of rural young people could be recruited into the teaching profession in rural areas if they were given opportunities for higher education. A recent study indicated that almost one out of ten scholarship awardees who had chosen teaching as a profession had actually made the decision *at the time they received the scholarship*. There are still too many young farm people for whom higher education is impossible.

Bureau Ednl. & Research
DAVID H. ... COLLEGE
Dated...
Acad. ...

NEED FOR FUNDS

Both of these problems, lack of incentive and lack of opportunity for training, can be solved with money. Farm families understand this only too well, but what can they do about it? They are unable to provide the right income and other incentives to attract the teachers they need. They are also unable to provide the opportunity for higher education and teacher training either individually or collectively.

Money for our public school system comes out of income. Average income per capita of the farm population (from farm and nonfarm sources) was \$889 in 1956; the average income per capita of the nonfarm population was \$2,010. In order to provide even the present inadequate educational facilities, rural people spend a higher percentage of personal income for public education than do urban people. In sixteen predominantly rural states, 2.46 per cent of total personal income was spent for public education, as compared with 1.84 per cent in sixteen predominantly urban states (1954 Bureau of Census figures).

The problem is not only inadequate income but the inequitable method of taxation used to finance schools. Since the beginning of our public school system, major responsibility for financing the education of our children has been borne by local government—the local school district and the local school board being the agencies through which public education is administered and the local property taxes the means by which it is financed.

In earlier days, the possession of land may have been a valid criterion of the ability to pay. But this is no longer true. Economists have long agreed that income alone determines the individual's ability to pay. Farm income has declined steadily

during the past five years, yet property taxes levied on farm real estate are increasing each year. Farmers are therefore caught in a grossly unfair situation—they earn less but are taxed more. In urban areas, on the other hand, the inequities of the property tax are not so obvious because the cities have the wider industrial tax base (except bedroom suburbs where little industry is found).

Finally, rural people are faced with higher costs of public education than urban dwellers. Even where rural school districts have consolidated to improve facilities and reduce duplication, transportation of pupils becomes a greater cost factor. Approximately half of the rural children attending primary and secondary schools are transported to and from school at public expense. No such transportation expense falls on urban school districts to this degree.

With the maximum good faith, rural communities lack the financial resources for adequate salaries to teachers, and for providing other incentives to attract well-qualified teaching personnel. With lower incomes and greater costs, they cannot hope to compete with urban areas for the already inadequate supply of qualified teachers.

The same problems—low incomes and high costs—also prevent rural people from improving the opportunities for teacher training. A farmer cannot afford to send his son or daughter to school when his income is barely enough to make ends meet. What's more, the son or daughter may be needed on the farm to reduce expenses of hired labor.

Added to this, many farm youth have higher college expenses than their urban cousins, who can commute to school, thereby avoiding the additional expense of living away from home. Another problem is that exceptionally bright

young farm people, if they are able to get a college education at all, find the small sectarian school more accessible than state universities which offer a greater variety of courses and better facilities. This statement is not intended to under-rate the splendid role that smaller schools have played in rural areas, but merely to point up the lack of choice available to farm youth, and the need for broader curricular offerings in rural farm areas.

PROPOSED SOLUTIONS

All problems in the field of public education are intimately related and we must work on them simultaneously. For example, classroom shortages are a deterrent to the recruitment and retention of qualified teachers. Good working conditions and fair pupil loads are as important incentives as good pay.

Farmers Union believes that the first step toward improving education in general in rural areas is to afford farm families the opportunity to earn adequate incomes on a par with other groups in our country. With better incomes, farm people will at least be able to pay their present inequitable property taxes, which are now such millstones around their necks. Sound farm programs to establish parity of income for farmers can greatly increase the ability of rural areas to help themselves in providing proper educational facilities and in giving young people an opportunity for higher education.

Improved farm income is not, of course, the complete answer to all rural educational problems because we are still faced with the inequities of the property tax and the higher costs of rural education. Farmers Union believes that these problems can be solved only by the application of the nation's greater taxing resources for the education of children in each of the states.

The first major goal is to obtain an immediate federal support program for school construction. Making the most strenuous efforts, state governments have not been able to provide local authorities with enough funds to close the gap between present services and educational needs because new sources of state funds are also limited. Even with the best of intentions, state and local authorities can no longer foot the bill. They are falling at least a billion dollars a year short of meeting the needs, and only by applying our resources as a nation can we make up this deficit. School construction can help tremendously in solving the teacher shortage by providing better working conditions and smaller pupil loads.

Farmers Union also believes that federal funds must be appropriated to supplement state and local funds in order to guarantee a minimum salary schedule for teachers.¹

All federal support should be used to

¹ Here is Farmers Union's specific recommendation made in *Remedies and Resources for Rural Schools*, the report of a Commission on School Support in Rural Areas (Department of Education and Information National Farmers Union, 1575 Sherman Street, Denver 3, Colorado, 1955), p. 46.

"A grant of \$186,200,000 to the states to underwrite statewide systems of minimum salary scheduling would form a foundation manpower allocation to the various states. Distributed on the basis of \$8 per pupil it would immediately provide the incentive for a first-step salary increase to teachers of approximately \$200 the first year in each of the 48 states.

"An additional grant of \$240 million to the states on the basis of economic ability and need would provide a total manpower grant of \$426,200,000 for fiscal 1956, and \$520 million for 1957, with the provision that no state may qualify for these federal allocations unless the present levels of expenditure for teacher salaries shall be maintained. This equalization grant would raise the salaries in the needy states above the \$200 by \$300 to \$800 per year. These allocations are outright payments to the states without matching requirements."

equalize standards of education throughout the country. We have already seen that rural people pay a proportionately larger share of their income for public education than do urban people. In order to achieve equal educational opportunity, the costs of education must be more evenly spread.²

The urban areas stand to gain far more than rural areas when this equality is achieved. The steady and increasing migration of rural working-age people to the cities means that urban areas will get the benefits of improved educational opportunities for rural youth. It is only fair that rural people should not have to subsidize urban communities to the extent they have in the past. One study estimates that the fantastic amount of approximately \$500 billion invested by rural people in the education of their young has directly benefited urban communities through the out-migration of farm youth over the past thirty years. Only by sharing this support load can rural areas attract a fair share of trained teachers to rural areas and keep them there.

To solve other incentive problems, such as poor living facilities and job insecurity, Farmers Union believes that

local and state authorities must make provisions in their budgets for the building of modern teacherages, and must provide tenure provisions in the law equitably merging the teacher's interests in securing job permanence with the local board's right to dismiss for cause. Too often states' tenure provisions have served as "firing laws" rather than as minimum protection for job security against arbitrary whims of school officials. In the last analysis, it is the child who suffers when the teacher is turned into a migratory worker because of lack of job security.

In regard to the problem of increasing opportunities for teacher training, Farmers Union recommends that the Federal Government, through allocations to the states, create scholarships in teacher-training institutions and universities.³

Farmers Union recognizes that scholarships to potential teachers will be pointless unless these students have somewhere to get their training. The problems now confronting our institutions of higher learning are grave. Ways must be found to compensate college teachers adequately and to finance necessary expansion of plant facilities. The state governments must be prevailed upon to increase appropriations to state-supported colleges and universities, and we must explore ways to apply a greater share of our nation's resources toward the solution of

² One way recommended by Farmers Union to equalize disproportionate costs is as follows: "A program of support to states for transportation consisting of (1) a basic allotment of \$500,000 to each of the several states granted 50-50 on a matching basis to encourage states to further develop programs of pupil transportation; and (2) an equalization fund of \$76,000,000 to the several states on the basis of need and fiscal ability. The formula for distribution should include the incidence of rural population, the relative economic capacity of the state, and the distances over which school buses must travel. A need factor thus determined will be used to allocate additional grants to the states, without required matching by the states. Such a formula would assure the greatest amount of financial assistance to those areas where the need is greatest and transportation problems most difficult to overcome. *Ibid.*, p. 60.

³ In 1955, Farmers Union specifically recommended the following: "Applicants in the various states by virtue of selecting a teaching career, being accepted by a teacher-training institution or university providing teacher training, qualifying under a state quota and by successfully pursuing a teacher-training program would be the recipients of teacher preparation grants of \$110 per month during the four years of their undergraduate schooling. The cost to the Federal Government of such a program would be approximately \$143 million dollars per year, or the cost of but 145 jet aircrafts out of the 6,000 budgeted to be constructed during 1956." *Ibid.*, p. 45.

these problems. Federal scholarships as a civilian GI program would be a step in this direction but would not completely solve the problem.

PREPARATION OF TEACHERS

Teacher-preparation is partly a financial problem involving the attraction of outstanding teachers to our colleges and universities, and providing the proper physical facilities to prevent overcrowding and mass-production teaching techniques.

The problem is also one of content. What constitutes proper training for teachers if all other things are equal? What, in other words, should be the broad goal of education? What do we want our children to become?

We certainly want our teachers to be more than trained technicians. We want to depend upon them to foster the spirit of true freedom, fearlessness, originality, imagination, and a healthy scepticism. This is the rich tradition of America which must be nourished in the home and in the schools.

When we talk about raising the standards of teacher-preparation we must keep constantly in mind that among the best qualifications of teaching is an open mind, an appreciation of the importance of progressive change, courage to stimulate free inquiry, and a desire to awaken in the student an aversion to authoritarianism, unthinking acceptance, and blind conformity.

We in Farmers Union recognize that because educational problems are all of a piece, improvement of teaching standards depends in the last analysis on improving the educational opportunities we give to our children. The bright five-year-old attending school on a split shift in an in-

adequately lighted and ill-ventilated basement may be the teacher of tomorrow. His professional training is starting right now. He is the victim of the negligence of a whole generation of Americans who have failed their children and themselves by not providing the best educational system possible in the richest country in the world.

Even if we start now with an all-out assault on these problems, we cannot expect to get out of the woods for another twenty years. For each year we will be fighting not only to remove the backlog but to take care of growing needs.

There is no *one* place to begin. Each of us in his own way will tackle one small aspect of the total problem, and each of us, as he makes some gains in his own quarter, will be adding to the achievement of a worker elsewhere. Thus the college teacher fighting for a better salary is fighting for improved teaching standards in our public schools and a better education for our children. The parent who is fighting for a new school-building for her son is fighting at the same time for better working conditions for the teacher. The rural community pressing for the use of federal support to equalize educational standards throughout the nation is, in effect, helping urban industry and business look forward to better-trained personnel who will migrate in future years from rural areas.

That is why Farmers Union is proud to have joined the vast coalition of groups throughout the country fighting on one front or another for improved education for our children. Only those who refuse to see the need, who for selfish reasons fight against improvements, or who sit idly by while others do all the work deserve our censure.

Professional Teachers for the Nation's Schools*

ERNEST G. SWIGERT

PRESIDENT, NATIONAL ASSOCIATION OF MANUFACTURERS

THIS year has brought considerable discussion of the professional status of the teacher in American society, probably stimulated by the centennial of the National Education Association, spokesman for America's teaching profession. It is appropriate that we take this occasion to pay tribute to education's accomplishments. It is even more appropriate that we take the opportunity to think about the future.

AN AFFIRMATIVE PROGRAM

I assume that I was asked to contribute to this issue on "The Professional Status of Teachers" because the readers will want to know what solutions to our educational problems American industry proposes. It seems to me that the theme of professional status should be approached as part of the larger question of our nation's educational needs.

Most educators know that the National Association of Manufacturers has had an

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Mr. Swigert is also vice-president and a director of the Electric Steel Foundry, and a director of the Stebc Co. at Vancouver, Washington.

Education Department since 1949. The Department was established to give breadth and depth to the Association's educational services, which have been part of our program from the very beginning. Maximum assistance is given to our efforts by the Educational Advisory Committee (46 members of NAM's Board of Directors) and the Educational Advisory Council (31 educators representing all levels of education). In February of this year, at a joint meeting of the two advisory groups, it was decided that the council of educators should develop an affirmative program to be undertaken by NAM to further the total educational process in the United States. A subcommittee, under the leadership of Dr. Benjamin C. Willis, General Superintendent of Schools, Chicago, Illinois, drafted a program. This was discussed and accepted by the Educational Advisory Council, whose chairman is Dr. Virgil M. Rogers, Dean, School of Education, Syracuse University, and submitted to the Educational Advisory Committee in June. The program will be published after final approval by the NAM Board of Directors.

Many people will be impatient with the idea of a committee and a report. They will say that you have only to look at the statistics on overcrowded class-

rooms and teacher shortages to know that an emergency exists and that "something must be done." It is true that action is needed, but it must be a positive, constructive, far-seeing program and not an impulsive flailing about.

We in America have problems because we did not look ahead sufficiently. The increasing birth rate gave five to six years' warning to elementary schools that they would have to accommodate an additional population. The high schools and colleges have had an even longer preparatory period. Yet there has been a tendency in many communities to wait until the young people were in the schoolyard before beginning to worry about who was to teach them or where they were to sit.

The inadequate supply of scientific personnel is another example of the defects of short-term thinking. Obviously the whole trend of our civilization has been toward increased and improved technology. Nevertheless, during the 1930's young people were discouraged from entering the field of engineering because *at the time* it was hard to get a job. Now we are frantic about the shortage of engineers and scientists.

These two examples make the point, I believe, that, while "emergency" measures give the impression of "doing something," what is done may not be right. Certainly something must be, and is being, done about immediate crises, but no one is satisfied with the emergency measures. Many communities, for example, have hit on ways to supplement the available supply of qualified teachers. I have heard of no community that wants to perpetuate these measures.

Industry has long since learned that "accidental" discoveries and inventions may have very important and startling results. However, no company facing a problem in engineering, product develop-

ment, or human relations is willing to wait and hope for that lucky discovery. Industry has learned that a systematic research approach is, in the long run, more effective than waiting for an "inspiration" or a "lucky break."

The National Association of Manufacturers, as a spokesman for American industry, believes that it can make its greatest contribution through the analytical approach which industry finds so useful in solving its own problems. That was the reason for asking the Educational Advisory Council to recommend a program. As citizens of individual communities we are, of course, doing our best to find solutions to the day-to-day problems. As an Association we hope to further the total educational process by developing an affirmative, long-range program.

This project is part of NAM's continuing interest in both the financial support of education and the recruitment of qualified teachers. The very existence of the Education Department reflects, we believe, our recognition of the need for cooperation between industry and education. Among its other achievements, the Department has exerted great leadership in bringing about an understanding of the financial problems of schools and colleges.

In 1951 a resolution was passed by the Board of Directors stating that:

Essential to the perpetuation of the American way of life is a system of education which includes both privately and publicly supported schools, colleges and universities. The privately supported institutions are in a critical financial plight. The public institutions, state and local, are likewise having serious financial difficulties. . . . Business enterprises must find a way to support the whole educational program effectively, regularly and *now*.

Since that time, we have published a series of booklets describing the financial

problems in detail and urging our membership to take action.¹

If there were no financial problems, the disastrous shortage of qualified teachers would itself constitute a national problem of major proportions. It is among NAM's basic tenets

That teaching should be regarded as one of the great professions; that teachers themselves should act, and should be regarded by the community, as members of such a profession; that this regard should be shown by paying teachers salaries commensurate with the service rendered by a great profession; and that businessmen, who carry a large part of the tax load, should take the lead in creating everywhere public opinion in favor of a salary standard for teachers which will help to attract the ablest young people and to hold them in the profession.²

We consider it important to provide leadership in the recruitment of teachers and the development of an appreciation of their role in the community. Since 1953, the Education Department has filled requests for more than 4 million copies of a guidance pamphlet, *Your Career in Teaching*. The recruiting theme of this pamphlet is:

Today, America is proud of her teachers—over a million men and women engaged in the profession of building better citizens through education. These men and women—members of the largest profession in the land—stand sentry at the gates of freedom. They are no less important to our country's destiny than our statesmen!

This year we published *Our Teachers: Their Importance to Our Children and Our Community*, as a further effort to

¹*Our Public Schools and Their Financial Support, Our Colleges and Universities and Their Financial Support, and Our Private Elementary and Secondary Schools and Their Financial Support.*

²"This We Believe About Education," a statement by the Educational Advisory Committee and the Educational Advisory Council of NAM, was prepared in 1953.

develop understanding and appreciation of the teacher's place in our society.

It is with sincere respect for the teaching profession and with a feeling of shared responsibility for the future that I wish to discuss the specific problems posed for this issue: recruitment, training, and financial support for education. The Educational Advisory Council's report includes recommendations on these subjects and I do not mean to restate its findings here. I wish, rather, to deal with the concern of industry in these matters which led to the request for the educators' recommendations.

RECRUITMENT

It is undoubtedly true that some people make a vocational choice, based on interest and aptitude, early in life and stick to it. The more usual situation, probably, is for the young person to consider several possibilities. "I could become a scientist *or* I could teach science." "I like to write. Should I prepare for a career in journalism *or* should I become an English teacher?"

The fact that it is considered by the young person means that each alternative has some attraction for him. The recruitment problem for education is that, having reached this point in their thinking, not enough young people ultimately choose to become teachers. We must, therefore, concern ourselves with the reasons for this. I gather from educators that the major obstacle is lack of professional rewards—in prestige and in pay.

Teachers are justifiably concerned about the low pay most of them receive. They are also troubled by the fact that neither their income nor the recognition accorded them is comparable to that of the other professions. Again we must look for reasons.

Undoubtedly one reason for this situa-

tion is that the teacher's job looks deceptively simple to the outsider. "Anybody can take a bunch of kids and . . .," say parents who cannot cope with two during Christmas holidays. This point of view is often reinforced by the teacher's own semi-apologetic attitude, which reminds one very much of the women who state their occupation as "*only* housewife." Thus the problem is complicated by the fact that many of the teachers who complain that their professional skills are not appreciated do not behave as though they were themselves aware of their professional status. The law clerk, the medical intern, the cub reporter, the beginning engineer exude an aura of "professionalism" that may sometimes be almost a caricature of their elders. It is, however, also an expression of belonging—the beginning of professional pride.

There are people who say that this differential in professional enthusiasm is the result of a differential in expectations. The law clerk or the medical intern feels that, if he works hard and is ambitious, there are no limits to his financial success. The student teacher, particularly the young man, knows that financial success is very limited. If this is true, if professional pride is influenced by expectation of reward, the problem is not merely the low level of teachers' salaries. It is the lack of opportunity for *individual* success.

The professional reward for the teacher—like that for the lawyer, doctor, or engineer—must take the form of adequate pay plus the opportunity for individual recognition.

It seems to me, therefore, that it is not enough to be concerned about general pay levels—although that is, at the moment, a very pressing problem. I strongly suspect that an across-the-board pay increase, welcome as it would be to people

now in the schools, would not be as effective a recruiting factor as the opportunity for individual recognition and differential reward. In planning for the future, American education will have to consider the fact that professional status means exposure to professional evaluation and to the laws of supply and demand. That is the full implication of "professional reward."

TRAINING

Industrialists should leave to intramural discussions among educators the problem of the relative weight to be given to liberal arts and education courses. We are, I think, more interested in the product than in the blueprint. However, there are several ways in which we can be helpful.

The first, and most obvious, is by giving teachers firsthand experience with industrial organization and industrial developments. Whether this takes the form of plant tours, Business-Industry-Education Days, summer jobs, or exchanging ideas in specially arranged meetings, we are always pleased to participate in such programs.

The second way in which industry can be helpful is by taking some initiative in recognizing the teacher's professional status. Most people are aware of the teacher's direct responsibilities—imparting skills and information, setting high standards of moral and spiritual values, developing expectations of an ever-increasing standard of living, and assuring economic and political literacy with respect to our way of life.

Fewer people realize that today's teacher must know *how* to do this. The educator's interest in the psychology of growth, the conditions of learning, and related matters must not be considered either a fad or "empire building." The

American people demanded that the teacher become an expert in human relations when they demanded that all children—regardless of aptitude, intelligence or interest—be educated for upwards of ten years.

The third way in which industry can serve in the training of present and future teachers is by making available materials which will help them to transmit an understanding of our society. The American youngster, brought up in an environment of freedom, takes it for granted. When he begins to try his intellectual wings, it seems easier for him to be critical of imperfection than to be appreciative of accomplishment.

This is as true of the teacher-to-be as of other college students. If the young teacher does not have opportunities to resolve his intellectual problems by putting them into perspective, he passes on a subtle aura of doubt where he should be transmitting confidence and pride. There has been a tendency, since the "exposés of propaganda" after World War I, to assume that "critical thinking" must mean "destructive" or "suspicious" thinking. Patriotism, instead of being a virtue, is looked upon as "chauvinism" or "corn," depending on the formality of the situation. This attitude has been mitigated somewhat in recent years but it is still with us.

Certainly, teachers should train their students to think critically, but the term should be used in the sense of objective judgment, not of faultfinding. Such an introduction of balance would go a long way toward developing the attitudes necessary for the preservation of our freedoms.

Moreover—and this needs emphasis—the most magnificent flowering of science and technology has always occurred in countries where liberty prevailed. The close affinity

between freedom and material abundance should give pause to those who derogate material progress. . . .

. . . If freedom is lost, if the dignity of man is destroyed, advances on the material plane will not be "progress" but a foundation for a new savagery.³

FINANCIAL SUPPORT

More teachers, higher salaries, more classrooms, guidance programs, laboratories, workshops, libraries—all mean money. It is encouraging that all segments of the population recognize that these services must be adequately supported. What is not encouraging is the assumption made by many people that the way to provide financial support is through federal "aid" in the form of "grants" to the states.

America is committed to public (tax-supported) education. The NAM is specifically committed to increasing the effectiveness and adequacy of the financial support of our public schools by the state and local governments. We must, then, answer the question, If you are willing to pay taxes to support schools, what difference does it make whether you pay state or federal taxes?

There are many answers to that question. I believe that four are most significant.

First, education is a function reserved for the states by the Constitution.

Second, federal control will follow federal dollars. It would be fiscal irresponsibility for the Federal Government to distribute billions of dollars without some control over how the money is spent.

Third, a federal program would, again of necessity, be directed toward some "national average" and not toward the needs of individual communities. We have been able to develop the varied edu-

³ David Sarnoff, in *The Fabulous Future*. (New York, Fortune, 1955), pp. 25-31.

cational opportunities that make universal education meaningful only because local communities have met local needs. We know we must pay for public education but we want to pay for what we need, when and where we need it.

Fourth, federal programs tend to become self-perpetuating, even when instituted as "emergency" measures. It is a basic as well as a traditional concept in the United States that educators are agents of the parents. The teacher's responsibility is to each child as an individual, not to anonymous "children." It follows, then, that control of education must be kept as close to the home as possible.

This year the need is for increased classroom construction. Hard as it may be to believe, in view of population statistics, there will come a time when we have enough classrooms. At that point we should either spend the public money on what is needed at that time, or lower taxes. This is always much easier said than done, but it is more easily done at state, county, or city levels than in Washington.

How, then, are we going to pay for current educational needs? We know that state governments have been spending record sums for school construction and that these have not been enough. We also know that our economy can afford only so many dollars a year for taxes and that the total tax bill is dangerously high. It follows that the federal tax structure must be reviewed and modified so that the states will again have the opportunity to raise funds for such vital projects as schools.

To achieve this we must educate people to the fact that "federal money" is not "free money"—not a handout from

a benevolent Uncle Sam that does not cost us anything the way paying local taxes does. This attitude has led many people to accept the idea of higher federal taxes—part of which will be returned as a "grant" to the states. That is the path to control.

EDUCATION AND FREEDOM

Academic freedom is indivisible from other freedoms. Therefore, it is to preserve all freedom that we must prevent encroachment on any one freedom. The following quotation from a college president shows that this is not only a businessman's viewpoint.

Our form of government, our economy and our cultural institutions all thrive in an atmosphere of freedom. No one of them can be free unless all are free; no one can be healthy unless all are healthy. So it is obvious that if, for example, there should ever come about any great enlargement of government control over economic life—and the corresponding diminution of the area of free enterprise—the freedom of our educational institutions might be drastically restricted. Soviet Russia provides the only illustration which one needs to reinforce this conclusion. I hope that the time will never come in the United States when a Washington bureaucrat can dictate what may and what may not be taught about genetics or aesthetics or historical interpretation or anything else. It will never come if we maintain the present balance of all our institutional responsibilities.*

The motto of the National Education Association's centennial suggests that education moves freedom forward. I would add the thought that freedom moves education forward.

* Grayson Kirk, "The Road Ahead." A speech made at the 58th Congress of American Industry, December 2, 1953.

A Teacher Union Leader Views School Problems*

CARL J. MEGEL

PRESIDENT, AFL-CIO AMERICAN FEDERATION OF TEACHERS

THE American public school system faces no problem that cannot be solved nationally, in the states, or in the community with public, administrative, and teacher cooperation. Let teacher remain underscored for emphasis and perspective in the reader's thinking. The quality of public education depends on teacher-pupil relationship, assuming that the teacher is well qualified.

There are, of course, conditions under which no teacher, whatever his or her qualifications, can teach efficiently. The fact that some teach as well as they do under adverse conditions and unsound policies, such as overcrowded classes and low salaries, creates public apathy to the problem as a whole.

THE PROBLEM

Since teacher shortage is our No. 1 school problem, let us examine the question, How can we obtain enough qualified teachers?

People who would like to minimize the reason for teacher shortage quote many

* Mr. Megel, a veteran classroom teacher with long experience in teachers' union activities, is serving his fourth term as president of the AFL-CIO American Federation of Teachers. He represents his organization on the United States National Commission for UNESCO, as well as in the conferences of the American Council on Education.

(and reliable) statistics showing a rapid recent and continuing growth in school enrollment. But we have had an increase in almost everything in our country in the last quarter century, from world perspective to the cost of living.

Some realistic school districts, spurred by their own incentive or by organized teachers, have taken steps to staff their schools more adequately. These are a growing minority, but still a minority.

In this atomic age, when most public needs and problems are solved by billion-dollar appropriations and a majority of our public services are generously financed, we still cling to the idea that schoolteachers ought to be dedicated persons, working for posterity instead of, among other things, a decent living. Furthermore, there is nostalgia for the one-room schoolhouse, and the ideology still exists that all schoolteachers ought to be either old maids, or young people working at the job of education until they can make up their minds to choose a better career or until marriage comes along.

To the average school administrator these misconceptions are ridiculous. Yet even among educators is found the curious philosophy that there is some ethereal, nebulous solution to the teacher problem. Too many of the people who administer and direct our schools, most

of whom are otherwise successful businessmen, refuse to apply simple business correctives.

Most statistics on the teacher shortage list it at anywhere from 75,000 to 150,000, using the lack of certification or something similar as the yardstick. By these devices they apply a public opiate.

Actually, the country is short 300,000 to 350,000 teachers qualified by a Bachelor's degree, which ought to be the minimum requirement for any teacher in our public schools. In twenty-eight states the legislatures have approved state funds to districts employing teachers with one, two, or three years of college. Fifteen others are silent on the subject.

Nearly every high school in the land employs some teachers with less than a Master's degree, commonly accepted as the standard requirement for a secondary school teacher. Colleges are robbing high schools of their teachers with advanced degrees, and public school districts the country over consider it conventional to send teacher recruiters into lower pay districts. In turn, the "raiding districts" lose their teachers to those paying more.

Few tenure laws are worthy of the name, and the "dedicated teacher" wishing to follow teaching as a lifelong profession receives little encouragement from this situation. A comparatively minute number of school districts provide their teachers with any kind of paid sick leave, health and longevity insurance, sabbatical leave, or severance pay. An even smaller number allow their teachers duty-free lunch periods of as much as thirty minutes, and in a majority of districts in cities of over 10,000, a day off for a funeral or a personal emergency means the loss of that day's pay.

Shall we attempt to correct these situations with panaceas which will be recognized as such by young people whom we

would all like to see enter schools of education and teachers colleges? Or shall we project and carry through a realistic program to give teachers true professional status and security in our modern economy instead of mere lip service?

SOME ANSWERS

Numerous individuals and organizations have attempted to supply answers. Many if not most of them have come from persons with little firsthand knowledge of the teacher's environment. The suggestions listed here are not solely the present writer's. They were adopted by the delegate body representing the membership of the American Federation of Teachers, which is comprised of classroom teachers only. They follow:

1. *Starting salaries of \$6,000 a year reaching \$12,000 in eight or fewer years at the Bachelor's level, with an additional spread of up to \$500 for training beyond the Bachelor's degree, so that teachers' incomes may be competitive with those of other professions requiring comparable education and training.*

This presupposes a single salary schedule. The highest B.A. starting salary in the country in June, 1957 was a newly adopted \$4,902 in East Chicago, Indiana, near Chicago. Lowest among 970 cities of over 10,000 population surveyed was \$2,000 in Fayetteville, Arkansas.

Maximums paid teachers holding only a Bachelor's degree ranged from \$2,500 in Fayetteville, also the nation's lowest, after six years to \$7,900 in Long Beach, New York, after sixteen years.

Fayetteville also pays its teachers with Master's degrees the lowest teaching salaries in the country to start, \$2,100, as compared with the Hempstead, New York, beginning salary of \$5,300.

It is in Master's maximums that teach-

ers' salaries show their greatest variance. The same M. A. teacher who is paid a top of \$2,770 in Camden, Arkansas, after eleven years can earn \$8,500 in New York's Garden City and Great Neck. The spread is \$5,730.

To the experienced school administrator these salary ranges spell teacher turnover, a shifting of teachers from city to city—and faculty disaster. Yet the Garden City and Great Neck maximums represent no quick road to riches. To reach these maximums, nineteen and twenty-four years, respectively, are required.

2. *State tenure laws to protect teachers from being discharged without proved, justifiable cause, after reasonable probation.*

The insecurity of year-to-year contracts containing interim clauses that require or provide no hearings for the accused teacher is an impediment to professional permanency. Teacher shortages are significantly less, all other things being equal, in states with laws that enable the dedicated person to enter teaching with the assurance that she can remain in the system without abnormal effort and establish herself as a permanent citizen in the community.

The good tenure law spells out valid reasons for dismissal and provides for public hearing, with the teacher represented by counsel of his or her own choice, and also for court appeal if desired by the teacher.

3. *Better teacher retirement pensions, supplemented by social security when desired.*

In the vast majority of school districts, adequate teacher-retirement pensions are nonexistent. Who would think that any schoolteacher would stay with teaching

long enough to need a pension? This, at least, seems to be the question in the minds of many school boards still living in the horse-and-buggy days. Teachers of some states have adopted optional plans to combine pensions and social security.

4. *Adequate cumulative sick leave and hospitalization, as well as medical insurance paid for from school funds. Also severance pay.*

These fringe benefits have long been provided for other employed professional workers of whom special education and training are required. Teachers are salaried professionals and, unlike self-employed professionals, cannot be classified as entrepreneurs. They are salaried workers who, having invested time and money in preparation, are entitled to protection against personal disaster, as well as an assurance of personal security after devoting a lifetime to the public service.

5. *In every school district, published personnel policies and procedures for hearing teachers' grievances and for assisting with classroom discipline—"open" personnel records which the teacher concerned may inspect.*

The necessity for published procedures is recognized by every teacher and most fair-minded administrators, yet few schools have them. It is worthy of note, however, that in 1957 the Massachusetts legislature passed a law requiring school districts to meet this standard. The teacher subjected to erratic personnel procedures is an unhappy person, and the "secret file" of teacher records and ratings is an evil without justification. Procedures for hearing teachers' grievances are essential to the existence and continuity of a permanent teaching staff, and "buck-passing" from principal to teacher in the matter of student discipline has

been one cause for a major number of teachers leaving the profession.

6. *The right of teachers everywhere to organize, negotiate, and bargain collectively with employers in the recognized American way.*

Teachers being employed professionals rather than independent contractors, it is inevitable that they should group together to negotiate with their employers for their own well-being and welfare.

Collective bargaining being a group instrument, individuals must come together in groups to use it. That is all that happens when individuals organize to form a union. They come together in groups to assert their democratic right to a voice in establishing the rules which will govern their own employer-employee relationship. This is what is meant by the term collective bargaining.¹

Most school administrators who have tried collective bargaining welcome it as a superior procedure for dealing with scores or even hundreds of individual employees. The collective bargaining contract is a master agreement for all teachers, subject to give-and-take conferences in which issues are resolved in truly democratic fashion. This is the basis for understanding and cooperation.

A law making collective bargaining mandatory for public employees, if either employer or employee wants it, has just been enacted by the Minnesota legislature and will be watched closely by employees throughout the nation. It provides for bargaining agent elections and conciliation.

THE PROFESSIONAL ENVIRONMENT

Obviously, the foregoing objectives and procedures are aimed at creating a good professional climate. They are pred-

¹ George M. Harrison, "Procedures in Collective Bargaining," *American Teacher Magazine*, October, 1957.

icated on the thesis that if teacher recruitment (student recruitment) is to be successful and we are to retain an adequate number of teachers in the classrooms, then we must make the profession and its rewards *attractive*. To be attractive to young people in our democracy, teaching must offer teachers the opportunity for a full life, academic freedom, and the pursuit of happiness in any ethical way.

Financial reward and the right to teach our future citizens with all the freedom of citizenship are prerequisite. It must be recognized that preparation by a young person to become a teacher does not insure the community of a teacher. Reliable sources estimate that California has 100,000 fully qualified teachers who are not teaching, and the state school superintendents of Michigan and Georgia have estimated that both these states have as many degree-holding teachers not teaching as are now in the classrooms.

For the most part, it must be conceded that our schools of education and teachers colleges are well qualified—better than those of most nations—to turn out good teachers. It is the obligation of the teaching profession to create incentives that will attract more and better students into the colleges. That highly legendary person called George will not do it for us.

Few employers grant salary increases and better working conditions unless the employees unitedly request them. The public as an employer is no exception, and PTA's do not penetrate far enough behind the principal's office to realize the handicaps under which teachers work.

Teachers, through their organizations and spokesmen, should be free to take the lead in informing the public of the needs inside the public schools. Then, and only then, will the problems of school finance be wholly solved.

Today's teachers are the guardians of

the profession tomorrow. They can best build teaching as a profession by making it one, and they cannot rely on others to accept the leadership which has been lacking for centuries to make teaching rank in stability and reward with equally professional callings and endeavors.

The American Federation of Teachers and its 450 Local Federations in as many communities, mostly metropolitan, are concerned at the lowering of requirement standards for teachers. Our answer has been: Make teaching attractive to people of high standards.

There is an ever-growing need for greater financial support for teacher education and training, but much of the money poured into teacher preparation will only *produce* graduates. It will not put enough of them in the classroom until the rewards and environment of teaching are improved.

INADEQUACY OF PANACEAS

Every profession, from medicine to music, in setting out to establish standards and stability, has faced the problem of ridding itself of panaceas. No other profession is today subjected to more irresponsibly conceived cure-alls than the teaching profession.

A lack of sound, tested remedies for the teacher shortage is responsible for the loss to the school system of 10 per cent of its teachers annually. The new teacher, starting with enthusiasm and high ideals, frequently meets head-on and without warning situations that cause her to conclude, "It's a rat race. I'll get out."

Teachers themselves need to rid the schools and their profession of the seemingly continuous crop of educational nostrums pressed upon them by unprofessional administration. Some of these are discussed below.

Attempts to reinstate the misnamed and discredited merit rating system of pay wherein a few chosen teachers (supposedly superior) are singled out for higher pay than that of their colleagues of equal or greater seniority, experience, or training.

There is no fair way of rating one teacher above another of equal training on a dollars and cents basis. The device was tried extensively in numerous school systems in the late twenties and early thirties, and disrupted teaching staffs wherever it was applied.

The system has, however, been revived in proposals made by some school districts. It obviously would wreck the single-salary schedule, which was adopted almost universally after ill-fated experiments with merit rating. It has been used currently as a club over teacher unions to try to force them to abandon requests for higher single-salary schedules.

Professional growth requirements known to every teacher as "busy work."

Although not so prevalent today as they have been in the past, such requirements are still being adopted by many school boards, admittedly to demonstrate to the public that "the teachers are being kept on their toes."

Higher pay, uniformly, for uniformly qualified teachers as now provided in progressive school systems is the workable solution to any school's desire for more competent teachers.

Lowering of professional standards so that school districts may employ non-qualified persons to teach; or housewives to act as teachers' aides.

Both of these are devices to "cope" with the teacher shortage and "staff the classrooms" rather than to set up salaries

and teaching conditions that will attract and retain qualified degree-holding teachers.

Current attempts to substitute mass instruction by television for classroom teacher-pupil relationship.

This is presently the most prevalent of the panaceas, resulting in "more wind than rain." It is comparable to the various unsuccessful attempts to provide mass instruction by radio in the twenties.

None can quarrel with television as a teaching aid, but the school system attempting mass credit courses on this basis finds itself with the problem of student dropouts and a programming cost that is higher than the per-student cost in the conventional classroom.

Teacher overloads.

This condition results from both classroom and teacher shortages. The one-time standard that the elementary or high school class should not exceed twenty-five pupils is being compromised, as is the requirement of a B.A. for every elementary teacher and an M.A. for every secondary school teacher.

Correctives are obvious. The problem seems to lie in obtaining them. The time has come for teachers to speak out, bluntly and clearly, to inform parents what overcrowding is doing to their children. Today's retarded child is all too frequently not one who *could* not learn, but one who did not have the opportunity.

Loyalty (test) oaths that do not apply

to all citizens but single out teachers and other public employees.

"Teach our children, but first let us question your loyalty." This is the innuendo of the test oath widely required of teachers amid a hysteria sweeping the country. Thinking Americans oppose this requirement because such oaths challenge the loyalty of teachers, many with years of dedicated service, merely because they are teachers.

CONCLUSION

Academically, and where it is unhandicapped by shortages of classrooms and of qualified teachers, American public school education is the best in the world. There is little wrong with it that money and better management will not cure.

Unfortunately, building and equipment needs are brought before the public only at intervals for the purpose of promoting bond issues, when the public is led to believe that if it votes yes, all ills will be cured. Teaching conditions and teacher shortages remain behind closed doors of the classroom, except that they appear sometimes in uninspiring statistics.

Building and equipping more and better schools, and staffing them, as well as the existing schools, with more uniformly qualified teachers are tasks equal in importance to those of national defense. A nation is only as strong as the minds of its people, and for this reason alone the Federal Government—the nation as a whole—must help solve school problems with over-all financial aid.

The Price of Good Education Is the Price of Good Teaching*

WILSON COMPTON

DIRECTOR AND FORMER PRESIDENT, COUNCIL FOR FINANCIAL
AID TO EDUCATION, INC.

COLLEGES in America have always needed money and if they are any good they always will. A dynamic society never reaches the point at which it may say, "We have completed the job. Nothing remains to be discovered." This is notably true of education—in study, in teaching, and of course in research. Especially is it true of higher education.

The worst place for complacency is in education. No one knows this better, or has asserted it more persuasively, than the educators themselves. In a world of change, education cannot resist change and it should not try to. That is why the educational pot is boiling more violently today than at any other time in this century. In important ways, American education—especially higher education—is confronted by the most formidable problems, the sternest challenges, and the greatest opportunities in its history.

But education costs money. Also it can waste money unless it provides good teaching by good teachers. Good teachers rarely are paid enough and poor teachers are usually paid too much. For

some time, college teaching as a profession has been one of the principal victims of continuing inflation. To a considerable extent, especially in the past few years, college professors have themselves been "financing" the higher education to which they are committed. But college alumni, foundations, business corporations, and other powerful forces have become aware of this anomaly and are doing something about it. This is today the most important "unfinished business" of the colleges, more important than their problems of brick and mortar. Higher education will never be any better than its teaching.

A quarter of a century ago the students in the privately supported institutions paid nearly three-fourths of the costs of instruction and study, and endowment income paid most of the remainder. This was the national average. The percentage now is between 50 and 60 per cent from tuition and fees; about 14 per cent from endowment; and income from voluntary gifts and grants provides most of the remainder.

The tax-supported institutions on the national average receive less than 20 per cent of their operating funds from the students, only 2 per cent from endowment income, about 3 per cent from gifts

* Dr. Compton was formerly president of the State College of Washington. He later served as the Administrator of the United States Information Agency. At present he is chairman of the Board of Directors, Cameron Machine Company, Brooklyn, New York.

and grants, and nearly 75 per cent from appropriated public funds. They too are becoming more diligent in seeking private support, and some of them are substantially dependent upon such funds, especially for the maintenance of standards of excellence to which colleges and universities generally aspire.

THE NEXT FIFTEEN YEARS

Most observers seem to think that the new patterns of our higher education are likely to be established by 1970 or 1975. Change will not stop then or, for that matter, ever. But a new plateau may be reached by that time and the scope, sources, and conditions of financial support will no doubt have important bearing on the height of the plateau and how level it may turn out to be.

A clue to what may happen in voluntary financial support during the next fifteen or twenty years may be found in what has happened since 1939.

Earlier this year, as I was retiring from the presidency of the Council for Financial Aid to Education, I compiled some comparative figures for the information of its board of directors and as an incentive to the Council to continue and expand its efforts in behalf of wider support of our colleges and universities. The tabulation below shows the gains in voluntary financial support of American higher education since before World War II. With the exception of the figures for 1956 these comparisons come from publications of the U. S. Office of Education. They are based simply on what the colleges and universities say about themselves. The 1956 figures are based on extensive surveys made by the Council for Financial Aid to Education, including *Voluntary Support of America's Colleges and Universities*, published in 1956.

During the past four years the gain in annual gifts and grants for current ex-

PRIVATE GIFTS AND GRANTS (IN MILLIONS OF DOLLARS) TO AMERICAN COLLEGES AND UNIVERSITIES

FOR THE YEARS 1939-40, 1949-50, AND 1951-52 COMPARED WITH THOSE FOR 1956

Purpose or Designation	1939-40	1949-50	1951-52	1956 (Est)	1956 Compared to 1951-52	1956 Compared to 1949-50	1956 Compared to 1939-40
Current Operations	40	118	150	257	+71%	+118%	+540%
Endowment	41	63	92	125	+38%	+98%	+205%
Plant Expansion	42	72	72	125	+73%	+73%	+198%
United States Total	123	253	314	507	+58%	+100%	+312%

Sources: U. S. Office of Education "Financial Statistics of Institutions of Higher Education," except 1956 figures.

1956 estimates based on surveys of "Voluntary Support of America's Colleges and Universities" and other surveys of the Council for Financial Aid to Education, Inc.

penditures was as great as that during the preceding twelve years; the gain in endowment grants as much as in the previous eight years; the gain in new gifts for plant expansion as great as during the preceding eighteen years; and the total gains for all purposes as great as those during the previous twelve years. The total of private gifts and grants in 1956 was 312 per cent greater than in 1940.

COST OF EXCELLENCE

Of course not all of the urgent problems of the colleges are financial. Perhaps the most urgent ones are not. But without reasonable financial resources none of these problems are likely to be solved. As the president of an eminent Midwestern university recently pointed out: the colleges and universities which are generally regarded as the "best" are institutions which happen to be reasonably well financed.

That there is a causal connection between excellence and financial support no informed person will doubt. If we want excellence in our higher education we will pay for it. In fact, we will pay for it whether we get it or not. If we allow the quality of our education to continue to deteriorate, we will eventually pay for it through national mediocrity. Dynamic economy will not continue dynamic in an intellectually inert society. The only way to progress in *things* is to progress in *thinking*. Ideas come first, things second. Great ideas come from great minds, and education is the most effective developer of great minds.

Scientists in recent years have repeatedly cautioned us that as a nation we have been borrowers rather than producers of the basic scientific ideas which have wrought revolutionary changes in twentieth century America. As a people we are evidently better known as organizers

than as inventors, as appliers than as discoverers, as doers than as thinkers.

Of course such an appraisal offends our vanity. But to whatever extent it may be true it is important, because it has to do with our future and the future of our country. Ideas are as important to our national future as are our other security measures. Perhaps they are more important, for throughout history ideas have been more powerful than guns and they may prove to be more powerful than hydrogen bombs. In any event, ideas and military security are two sides of the same protective shield. We had better take care of both sides. Walter Lippmann not long ago pointed out in his syndicated newspaper column that, with all our economic might and our growing dependence on education, we as a nation are today investing in our schools and colleges a smaller proportion of our national income than we invested in them nearly a half century ago.

We had better change our ways, whether we do it through voluntary support or our tax monies or both. This applies especially to our colleges and universities. In one way or another they will virtually set the pattern of our entire system of public education. And just as important, they will spearhead what we call "research." This is nothing new. It is the same search for truth which led Pythagoras, philosopher and teacher of ancient Greece more than two thousand years ago, to say to his students: Seek to learn of what and how the world is made, that you may find a better way of life.

Nowadays we are all tax-conscious, and it is well that we are. We begrudge our colossal military security budgets. But we are assured, by those on whose judgment we must depend, that these expenditures are necessary. We accept them because *we have it to do*.

FINANCING HIGHER
EDUCATION

Eventually I think we will do the same with the necessary budgets for our colleges and universities. Higher education is now nearly a three-billion-dollar-a-year enterprise. This is considerably less than 1 per cent of our net national income. By 1970 higher education will require at least five billion dollars a year.

In most of our states people already are asking such questions as these regarding even their own state universities:

Should we limit the number of students to be admitted? (33 states)

Should we at least limit the number of out-of-state students? (38 states)

Should we require out-of-state students to pay full cost? (29 states)

Should the states, out of public funds, give financial aid to private colleges and universities? (24 states)

Should the additional financial needs be met through increased tuitions and fees? (32 states)

The American people are being faced with difficult choices. Are we going to hold to the tradition of "opportunity for all"? Will state universities gradually become provincial? Will the colleges and universities be required to depend more and more on their own "earnings"? Will any higher educational institutions be *permanently* and wholly independent of the state?

These are among the issues which gradually are coming to the surface. I believe the decisive answers will be found within ten years. These answers will be hardly separable, however, from individual citizen decisions regarding sources, scope, and dependability of financial support of our colleges and universities; and in such matters citizen *indecision* may be just as decisive as citizen *decision*.

This is why I regard the nation-wide advertising campaign in behalf of Ameri-

can colleges and universities now under way through the Advertising Council as of great importance. In this country, higher education long ago ceased to be the business merely of "intellectuals." It is everybody's business and everybody will be affected by what happens to it. The Council for Financial Aid to Education is sponsoring this campaign in the hope and expectation that it will eventually broaden public understanding of the significance of higher education in American life and widen the sources of its financial support.

BUSINESS' INTEREST IN
EDUCATION

I have mentioned some important ways in which our country has become ever more dependent on education—and especially on higher education—as a source of economic productivity, as a stimulus to individual enterprise, and as a vital part of security. These outcomes are especially important to business, and business corporations may be expected in their own interest to take an increasing share of the responsibility for maintaining the diversified system of higher education which has become one of the bulwarks of progress in our industry and commerce.

This concern of business is important to the financial future of the colleges too, because a constantly increasing share of the disposable earnings of our people is in the custody and at the discretion of business corporations. Industry is as dependent upon the colleges as the colleges are upon industry. If there is a mutuality of need there is also a mutuality of interest.

During the next two decades there will probably be important changes in the framework of our higher education, in the methods and means of teaching

and study in the colleges, and in the sources and scope of their financial support. There will be, as there is now, occasional uneasiness about the competence and the objectivity of college teaching, especially in fields which easily invite controversy. This uneasiness will be shared by educators and laymen alike. There will be, as there is now, occasional temptation to seek to "influence" the scope and content of the teaching. This temptation will continue to be resisted.

TREND TOWARD CONFORMITY

One of the most significant forces at work in our national life is the accelerating trend toward conformity. Or perhaps it is inertia rather than a force. Already a great hazard, it is increasing. Some call it anti-intellectualism, but it is more than that. It is, for example, the source of the derogatory present-day term "egg-head" applied to a person who for reasons of his own has some theory which is different from the prevailing reasons and theories of his neighbors. The youth stage reflects a cult of conformity. The adult stage is marked by mediocrity—an inability or at least unwillingness to be different, as illustrated by *The Man in the Gray Flannel Suit*.

This conformity stems in part from the trends of legislation and government which gradually over the years have been substituting objectives of general welfare and security for objectives of individual opportunity and initiative and regulation by law for the discipline of responsible individual choice; and in part also from fear of war, anxiety about survival, continuing monetary inflation against which by himself the individual is impotent, and worry over possibilities of a depression.

But in large part it comes, I think, from our growing habits in advertising, travel, radio, television, and communications of

all kinds. These tend to encourage sameness in popular response and behavior, in standard, and, if one is to believe the psychologists, in predictable mass reactions. This sameness shows up, for example, in the clothes we wear, the food we eat, the songs we sing, the radio programs we listen to, the television shows we watch, the popular travel and recreation routes we follow, in the cigarettes we smoke—if we smoke cigarettes—and in the growing nation-wide passion to "keep up with the Joneses."

These habits are a natural and perhaps an unavoidable by-product of our mass production, which is the only practical way we yet know of securing for ourselves the benefits of great advances in science and technology. They undoubtedly are responsible for our higher standards of living as measured by goods and services. They are nevertheless pressures toward conformity; and conformity ultimately means mediocrity, and mediocrity ultimately means stagnation.

FREEDOM THE SAFETY VALVE

Our colleges and universities should be kept as free as possible from these pressures. These institutions have become, and should continue to be, our greatest sources of new ideas and new knowledge. In classroom and laboratory they should encourage free inquiry, experiment, originality, inventiveness—what the scholars call "widening the horizons of knowledge." Where all people think alike no one thinks very much. Our economy—in fact our historic American way of life—has been based more on differences than on sameness, more on originality than on imitation, and more on something new than on something old.

No one knows better than the heads of our industrial and business enterprises the significance of keeping open the door

of encouragement to new ideas, however unorthodox or however nonconformist. Had it not been for someone's "fantastic" or "preposterous" ideas somewhere along the line there would, for example, never have been a modern department store, or a telephone, or an automobile industry, or commercial aviation, or electronics, or atomic energy or even the lowly zipper. Think of the so-called "cranks," "crackpots," and "impractical theorists" in the background of important inventions which are now commonplace. The radical of yesterday is often the conservative of tomorrow.

There is, of course, no place in education for so-called "freedom," which is in fact a masquerade for dishonest teaching or a subterfuge for subversion. But honest academic freedom in its colleges and universities is a great safety valve of a free society, its greatest long-time safeguard against mediocrity, stagnation, and

the fantasies and deceits of socialism. Freedom may be dangerous; but it is the safest thing we have.

It is more important to keep the spirit and the habit of free inquiry alive and alert in our colleges and universities than in any other of our institutions. If we allow ourselves—and our higher educational institutions—to drift into an era of conformity, we will ultimately produce nothing more and nothing less than a wasteland of the mind. Whether we understand, believe in, and nurture an environment sympathetic to the *creative* mind is one of the crucial questions of our generation. Largely upon its answer depends the future not only of our education but of our country. Always there must be room for faith of, and in, the individual, an arena for conflict of ideas, a space for the nonconformist. What happens to American education will eventually happen to America.

The Rights to Life, Liberty and—Learning*

LOUIS WILLIAM NORRIS

PRESIDENT, MACMURRAY COLLEGE

IN America the belief has been dawning that man's inalienable rights to life, liberty, and the pursuit of happiness, and especially the last, are contingent upon the success of education. These rights are vacuous formalities unless learning finds ways of preserving, prolonging, and enriching man's lot.

It is commonly asserted that "nobody can get anywhere without an education." Since the American dream was fashioned around the conviction that every man, and now every woman too, can "get somewhere" with the proper application, this application has come to include formal learning. The fact that most states require their youth to attend school until the age of sixteen, and the further fact that the percentage of high school graduates who go on to college has been increasing about 1 per cent annually for the past seventeen years, support this growing conviction. To be an American is to possess the right to be taught how to make something of oneself.

This right to learning is a powerful

idea that will grow in acceptance and never diminish. As a people, Americans are groping for its implications. But even in the South, the dispute is less violently *whether* all have a right to learning, than *how* this right is to be guaranteed and by whom. Actually the turmoil in the South spotlights the fact that this insistence upon the right to learning has not carried over into the obligations which such a right imposes. As America becomes conscious of its intellectual birth-right, the duties which will make possible the realization of this right must be thought out.

Much of the discussion about the teacher shortage has been on a supply-and-demand level, as if the problem were primarily one of economics. To be sure, the economic factor figures in the shortage. The teaching profession is less adequately rewarded economically than any profession requiring comparable training. But this condition has its base in the failure of Americans to accept the duty to provide the quality of teaching they realize that youth are entitled to. The problem must be looked upon ultimately as a moral one. The root of the teacher shortage lies in the failure to put on the teaching profession a premium high enough to correspond to the right to its services. When this imbalance is cor-

* Before assuming the presidency of MacMurray College in 1952, Dr. Norris was Dean of DePauw University. He is a member of the Commission on Teacher Education, Association of American Colleges, and the author of two recently published books—*Polarity: A Philosophy of Tensions Among Values* and *The Good New Days*.

rected, other phases of the problem will fall into place.

II

Before going further, this discussion will consider the range of the right to learning.

First, should this right be interpreted to mean that every high school graduate is entitled to a college education? Granted that many who are not going to college do not want a college education, what of the rest? Many colleges and universities pride themselves on selective admission, or at least on "selective retention." Unquestionably, the best brains should be trained for the best social economy. But this is not to say that lesser brains could not profit somewhat from a college education. Furthermore, an industrial society provides many opportunities for employment where the highest intellectual ability is not needed. The most productive society, and the one able to use its leisure most creatively, will be the one in which each of its citizens is educated to the best use of his talents, whatever they may be. A classless society, intellectually and perhaps culturally, will remain a permanent impossibility. But a Platonic Republic in which each citizen is educated for the class he fits by virtue of his talents would be hard to surpass.

This means that the duty to find college teachers will increase rather than diminish. The exclusion of students from college must be only because of inadequate facilities, not because the students applying for admission do not possess the right of entrance. There is efficiency in educating students in groups of comparable ability and similar educational objectives. But to affirm that only the highest abilities deserve attention can only mean that colleges are for teaching those who will learn with the least teaching.

That conception of teaching would degrade the profession rather than exalt it. The percentage of students going to college will continue to increase, and it should. The magnitude of the duty to find a sufficient number of teachers must not obscure the implications of the right to college.

Secondly, does the learning to which everyone has a right include all the knowledge that has come to light in the modern age, or even in the twentieth century? Whereas the learned man in the medieval age considered his task to be merely that of preserving and transmitting knowledge, these measures can be only a part of the modern professor's job. Were this still the professor's job, an astronomical number of teachers would be needed to man the universities. But quite apart from its impracticality, such a conception of the teacher would be a wooden one. The tendency for the teacher to lapse into the role of uncritical dispenser of facts remains an occupational hazard. Only selective learning of such facts as make critical thinking effective, since it cannot occur in a vacuum, will suffice.

To expect the schools and colleges to supply all the information a student lacks, or to offer a solution to each concrete problem he confronts, makes the schools forever necessary. Actually, they should look to the time when they can go out of business with each student, as he takes over the process which they have been performing.

The curricula of many schools and some colleges have been aptly called "invertebrate." They must be given such spine as will enable the limbs of knowledge to express coordinately a living and relevant intelligence, and not merely a cavernous memory. A prodigious number of teachers is needed, but not enough

to teach everything under the sun. A curriculum half the size of that in the average school or college, given to twice as many students by the same number of teachers as are now in service, might be a still better educational program than is now offered.

In the third place, does the right to learning justify luring teachers into the profession when other professions are shorthanded too? Meredith Wilson is doubtless right in saying, "... any teacher we get [in the next decade] will be drawn from other professions."¹ Yet there is good reason to hold that such prior recruitment is not only permitted but morally praiseworthy. Obviously, the other professions depend on learning for their success, and most of them on learning at advanced college levels. Furthermore, other enterprises, such as industrial production, can wait. The standard of living is already higher than at any time in history and higher than that found in any other country. But learning can't wait. The discovery of human talent and the focus of human effort on reliable values must be a day-by-day enterprise. "Time is of the essence" in a more significant sense within the educational economy of the country than it is in its legal sense.

About the only exception to the right of teacher recruitment to take priority over other professional needs may be found in medicine and its branches. Education serves to provide the standards for advancement of a society. Medical protection of the society during this advance is perhaps of equal urgency. Military protection, of course, remains an obstacle to the pursuits of manpower. But

this discussion assumes a period of peace during the next ten years. Wars necessitate exceptions to nearly every rule, but even medicine and military service can never, under any conceivable circumstances, be more than coordinate with teaching in importance. They remain logically, and much of the time practically, secondary to it.

Fourth, does the right to learning carry with it the prescription by an inchoate democracy of the pattern of what shall be learned? Boards of education in charge of public schools and boards of trustees in charge of colleges and universities are usually lay educators. How far should they determine the academic life of their institutions? Are they to look for more teachers to offer the instruction *they* consider sound? "Democratic education" has often carried with it the fallacious assumption that group conference and discussion will yield inevitable truth. But "one wise man's verdict outweighs all the fools'." To expect the teacher to convey to learners the consensus of his elders alone is to deny the function of the teacher. It is to imply that new truth is less important than what everybody approves.

Schools, and particularly colleges, should be leaders of each generation and not mere coordination centers of common opinion. This means that teachers must be expected to be more competent than their employers, more original than the public, and, if possible, more penetrating than their ancestors. Democracy must support, then follow, its intellectual leaders. Its teachers must be given time and encouragement to fashion, by use of their special training and experience, the paths their generation is to follow. A democracy that believes in itself more than it does in its teachers, is willing to mill around in its own mediocrity and

¹ Charles G. Dobbins (Ed.), *Expanding Resources for College Teaching* (Washington, D. C., American Council on Education Studies, Vol. XX, No. 60, October 1956), p. 11.

to find satisfaction in mere stagnation.

In the frantic effort to secure enough teachers, it must not be supposed that just anyone can teach at any time. Clarence Faust wisely points out that all educated people should turn back to the learning process and begin instructing the young as soon as possible, for the education of the young is "the responsibility of all our people."² But the teaching profession must keep its standards of excellence as the leading profession in its society. The right to learning carries with it the duty to supply teaching of the highest caliber. Democracy does not generate automatically competent teachers any more than it does an adequate program of education.

If democracy is unable of itself to generate a valid plan of education, or to yield competent teachers from its ranks without special preparation, it is also unable to command exclusively the intellectual loyalty of its teachers. To require of teachers that they indoctrinate their students with any political creed at whatever stage is to assert a finality of wisdom on the part of a society at that time which history makes ludicrous. It is to assert that teachers are to search for the truth as they see it and convey it to their students on all subjects except political ones. To try to hold a society fast to the political, economic, or even moral and religious patterns it has reached in a given generation is smugly to assert that truth is static, or else that no other generation has been wise enough to find it. A healthy democracy cannot afford to make these mistakes. An abysmal relativity is not the alternative to this fearful view of change. Emerson's belief that

the universe is fireproof and that one may strike a match for truth without danger of conflagration is the only assumption that makes learning worth the trouble, or indeed free from hypocrisy.

It may be concluded that the right to learning belongs to students possessing a wide variety of talents, that it extends to selected fields of knowledge and carries with it the need of qualification in continuing selectivity, that it puts a priority on the teaching profession which tops other professions, with the possible exception of medicine, and that it calls for teaching which has devised its own content and such standards of excellence in presentation as are germane to the truth sought, and not merely approved by common opinion. It follows that the first order of business in this generation is to find a sizable number of teachers who are able to develop sufficient competence to explore new truth, transmit such old truths as are needed, and to inspire sufficient confidence to merit a large amount of freedom in leading American democracy.

III

How are these teachers to be found? First, efforts must be made to elevate the public estimate of teaching as a profession. Candidates will not flock to the profession as long as it is so easily caricatured. "Professor," "egg head," "academician" are epithets for the scholar. They are, of course, rationalizations by those who excuse themselves from rigorous thinking. They represent an anti-intellectualism of a country long accustomed to "doing things," such as conquering frontiers and building factories. The intellectual heritage that has come from the professional scholar must be dramatized. The scholar must be paid a wage comparable to that received by other

² "Is Education Preparing for the Next Two Decades?" (New York, *Proceedings*, Sixteenth Annual Forum on Education, The Tuition Plan, February 8, 1956), p. 22.

professional workers. Administrators, especially of public schools, should not allow teaching to be talked of as a steppingstone to something better; for example, marriage or further training for another profession.

It must be shown that history is made by ideas, and ideas came largely from the schools. If the work of Thomas Jefferson, Jonathan Edwards, Samuel Johnson, Benjamin Rush, William T. Harris, Ralph Waldo Emerson, Henry Wadsworth Longfellow, Charles William Eliot, Horace Mann, Robert E. Lee, William James, and Woodrow Wilson were deleted from American history, what a shambles it would be! But these were all schoolmen in one capacity or another. The teacher introduces ideas into the experience of learners, who are never quite the same thereafter. This remains true even if the ideas of the teacher are actually rejected. The Marxian doctrine that ideas are a consequence of economic conditions is only a half truth. Some of the most original and socially useful ideas have come from scholars whose economic lives were modest and whose social settings were alien to their beliefs.

Toynbee's *Civilization on Trial* has made vivid in recent times the fact that the world conflicts of today are ultimately ideological. The Western world contends for the principle of trial by jury and the free play of the individual within institutions, while the Communist world fights for the superiority of the institution and its right to indoctrination.³ Neither side has made religion and morality basic to its institutional life, but such a development is at least theoretically possible in the West. There could be no more historic moment than now to

master ideas and see to it that those which release and enrich human life prevail. Ideas *are* making history. The privilege of learning which ones deserve to guide history offers to the teacher a role in history no other profession can claim.

Moreover, it is the teacher's privilege to go on learning forever. No other profession can offer this opportunity so fully. In this endless enterprise man perfects his most essential nature, his destiny, entelechy, or intelligence, as Aristotle held. It is ultimately the "vocation" of all men, said Fichte, to find out who they are and what their place is in the scheme of things. In short, the opportunity to develop one's own potential and to influence one's generation to do the same, lies in the teacher's hands. What more lofty motive for any vocation is there?

Efforts to attract teachers to the profession by emphasis on security, long vacations, short hours, good retirement provisions, and pleasant working conditions are largely futile. These are surface appeals, and they are matched, or even excelled, by many other vocations anyway. The invitation to make the most of one's own powers and those, in turn, of one's generation is not, on the other hand, a surface appeal. Such a privilege should be held out to students as early in their school career as any vocations are discussed. The hesitancy of high school students to say they want to be teachers or professors reveals that they have not been urged to consider this possibility, or else that their teachers have not revered their own work enough.

IV

Undoubtedly the worst danger in the next decade is that teachers who are poorly trained for the job will be pressed into service. The recent Harvard report on teaching considers it "unlikely that

³ See also Gordon K. Chalmers, "Education and America's Need." *The Educational Record*, July, 1953.

the ideal of the teacher-scholar will long remain very meaningful in practice."⁴ But if it doesn't, disaster is ahead. No one seems to be suggesting that lower standards in other professions are inevitable. The reason is that they will not be tolerated. To take it for granted that less well qualified medical doctors will soon be inevitable would be regarded as a national scandal not to be dreamed of. While the need for teachers will be greater presently than the need for personnel in any other profession, measures for preparing teachers must be as drastic as would be devised if a comparable shortage of doctors were confronted.

Suggestions keep coming for a so-called "teaching degree." But most of these schemes of preparation for the teacher envision him as a purveyor of knowledge already discovered by others. This is a retreat to the impossible standard of the Middle Ages, as was pointed out above. Furthermore, it would engender a whole generation of students allowed to think that education consists in the mere amassing of knowledge. No teacher who has not learned how to think under the critical scrutiny of masters in his field can teach students to think.

The narrowness and impertinence often ascribed to the Ph.D. are more often flaws in its possessor than in the character of the degree. Unless the teacher learns all about something and something about everything, he will not be able to select relevant material for his charges. He must know how to organize, compress, evaluate, and devise relevant perspectives for his students. Then he must see to it that they learn to do the same! Nothing short of these tools of the scholar will do for the teacher.

Plans for larger access to properly trained teachers are much more promising. Teachers' aides to do the chores in public schools, and student assistants in college can free teachers for their real job and at the same time interest more students in becoming teachers. A faculty can and should study its own business in order to train its members to project their material to much larger groups. A small class may allow mumbling, disorganized discourse, and infrequent use of diagrams, charts and other visual aids—all of which shortcomings actually perpetuate poor teaching methods. These weaknesses are minimized in a small class by the privilege of asking questions. Questions should deal with implications, relations, deductions, not with what the professor should have made clear in the first place!

V

How can such an expanded program of education be paid for? Easily, if the importance assigned to the teaching function above is granted. There is wealth in abundance for full-scale education of all the American youth who will want it in the next twenty years. The public will to spend it for this purpose remains to be created. Six or seven times as much of the national income is spent now on tobacco and alcoholic beverages as on education. Five or six times as much is spent on items clearly definable as luxuries as on education.

This country has come to the place where the question of supporting its people is no longer an issue. The only question is what *kind* of life it wants its people to have. America has already justified such funds as it has spent in the past on education by the remarkable growth in its standard of living. Countries like Colombia and Brazil have vast natural re-

⁴ Oscar Handlin (Chairman), *Report: Harvard University Committee on Teaching* (Cambridge, Mass., May 15, 1957), p. 24.

sources, but remain on a relatively low standard of living. The clue lies in the low level of educational support common there. Russia is fast catching on to the fact that profitable use of natural resources is connected with education. In this country the question is now not merely that of educating youth to keep the wheels of production going, but of educating them to appropriate also those values that count beside the economic.

Let the public demand of its colleges that they close their economic ranks as tightly as possible. This must be done by insisting that teachers become competent in handling larger classes. A ratio of twenty students to one teacher is more economical, more interesting, and just as educationally sound as half that number. Whether the ratio should go up to seventy-five to one will depend on the ability of teachers to build up sufficient competence to handle that number. Few today are able to handle such classes adequately. A closeup of hours when class-

rooms stand vacant will also be necessary.⁵ No business would expect to remain solvent with as much floor space standing idle as the average college tolerates.

There is money for more teachers outside and inside the colleges and universities.

VI

To the right to learning correspond the duties of securing training, and supporting such teachers as will enable the cultural life of America to flower. One hundred and thirty-five years ago Hegel, in the introduction to his philosophy of history, suggested that the next center of world history might well be in the United States. The teachers have this magnificent possibility in their hands. America cannot afford to stay those hands.

⁵ See Beardsley Ruml, "Pay and the Professor." *Atlantic Monthly*, Vol. CXCIX, No. 4, April 1957, p. 49.

Institutional Cooperation in Teacher Education*

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THE changing and increasingly significant role of the teacher is under scrutiny today by leading higher educational institutions engaged in teacher education. Shortages, both in numbers and in desirable qualifications of teachers, press for attention. In particular, the need for schools to cope with the problems of expanding technology through the preparation of the necessary trained manpower, the need for schools to deal with the clarification, modification, and selection of the human values inherent in the culture of a free people, and the opportunity for schools to foster political integrity and decency in the world of many peoples, all highlight the task of teacher education today. Colleges for teacher education share this task and are endeavoring to discover its proportions and the means for accomplishing it.

The urgency of temporary specific questions in teacher education sometimes preoccupies such institutions. Rising elementary school enrollments have re-

cently posed the question, for example, How safely can we compromise teacher education programs to put into the classrooms of the schools better teachers than would otherwise be there if regular pre-service standards were maintained and emergency appointments were made from a pool of miscellaneous available personnel? Special short retraining programs have been offered widely. The time is fast approaching, however, when such questions must give way to the more fundamental ones related to the long-term task of teacher education.

We know now that the standards of proficiency of regularly prepared beginning teachers must be raised if the schools are to meet their increasing and sobering obligations. We know that teachers now in service are hungry for new inspiration and improved understanding and skill to cope with their responsibilities. We know that the admission to teaching of persons with submarginal preparation must soon stop if the teaching profession is to make the necessary gains in dignity and usefulness.

It is no secret that the short supply of properly prepared teachers is a special case of a shortage of trained manpower for all professional and highly skilled occupations. This shortage will persist for another decade, but after that time some-

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thing resembling a normal correspondence will be attained between the work to be done and the available pool of manpower to be prepared to do it. Then the community will have to make a budget of its needs and resources for services, with priorities given to some kinds of service. The wise and efficient use of available manpower resources calls for frugality and prudence with respect to all groups in competition with one another. The beating of recruiting drums, currently in loud crescendo from scientific and technological quarters, may help to interest and motivate undecided youth and to raise the pay of teachers at all levels, but it leaves the basic economic problem of limited manpower and excess work load unsolved, if not aggravated. If "teacher aides" are needed today, not primarily to enhance the quality of performance of the superior teacher but merely to extend her reach, so also is a limit needed on the stockpiling and uneconomical use of engineers and technologists.

There is no doubt of the urgency of higher salaries and stronger motivation of potential recruits and present members if the teaching profession is to advance and education is to improve, but the problem of shortage is not so simple as it may seem. The basic question is, What does the community want from its teachers and its schools? If the appraisal given on this point shows an awareness of a vital function and a determination to fulfill it—even at a high cost, as compared with the satisfaction of felt needs for recreation, home conveniences, faster and easier travel—we shall solve the shortage of good teachers quickly and for a long time to come. Teacher-education institutions are preparing and will be prepared to furnish an increasing supply of even more highly competent teachers

when the signals of need for them and appreciation of them come loudly and clearly from the general community. Even the trials of teaching amidst conditions of cultural turmoil and social disorganization will not deter able young people whose commitment to the profession is really wanted and whose superior professional preparation for intellectual and spiritual leadership is truly appreciated and rewarded both economically and in terms of human values.

Assuming that such a reappraisal is under way and that the role of education in our society is returning to something like the central one which was conceived in the early days of the United States of America, when freedom and independence hinged upon it, let us look briefly at the task of reconstruction and development in teacher education that is implied. This is a very large and diversified task, for changes in educational needs are appearing rapidly and in terms of complex requirements in society. Far beyond literacy and a common universe of discourse based upon mastery of certain stated branches of knowledge, the task today is related to the high competencies of intelligence, sensitivity, and skill involved in creative invention of instruments of human relations, in selection from a welter of unpalatable as well as appealing cultural values, in the disciplines of moral and spiritual integrity—all combined with the appropriate facility in the technical art of education.*

* At this point the author feels constrained to make clear that his analysis is offered on his own responsibility, though with generous consultation from his official colleagues, and does not in any way commit the American Association of Colleges for Teacher Education. If what he says is in any degree representative of the Association, it is only because he has learned much from the Association and his inferences have been fortunate, rather than because the Association's program has been deliberately and

Reconstruction and development in teacher education are now strongly indicated in a number of particulars. The first has to do with the conception of the pre-service minimum program. It is now evident that the four-year baccalaureate course offers insufficient time to prepare the teacher for entry upon a regular teaching assignment. Five years are now needed, and many people believe that six years will soon be necessary. A fifth and even a sixth year will not greatly improve the product, however, unless the additional time is used with imagination to reconceive the total pre-service program, building into it over the entire period stronger scholarship, more functional general education, a more realistic acquaintance with children and youth, and a more clinically defensible internship on the job. Moreover, little improvement can be expected in the long run unless the pre-service program is treated as a minimum for the beginning teacher and the ground prepared for continued professional and scholarly study in the ensuing years by the teacher in service.

The general education of the teacher is a second area needing improvement. Widely diversified approaches to this subject are in operation in colleges, ranging all the way from a required list of courses introductory to the major fields of knowledge to a program distinguishable only for its objectives of kindling intellectual curiosity, enhancing sensitiv-

explicitly built upon these ideas. Moreover, the reader should understand that the Association is no longer an accrediting agency, that former function now being exercised by the National Council for Accreditation of Teacher Education. The Association has never been a teacher certifying body, that function being exercised by state government agencies. The interest of the Association in standards for both accreditation of institutions and certification of teachers is real, but is contained in its program to facilitate study and improvement of such standards and the practices related thereto.

ity of an intellectual, spiritual, or aesthetic nature, and developing integral perspective over the divergent facets of human life. Apparently there is still room for much theorizing and experimentation before either the precise connotation of the idea or its means of accomplishment in the educational program can be confidently recommended. The persistence of the question of collegiate general education, however, is ample evidence of its importance in a total program of preparation for professional leadership of any kind. For teacher education the question remains crucial, since the teacher's own function is so largely concerned with it. Even if ways and means are in doubt, teacher educators know that personal maturity, cultural awareness, and intellectual leadership remain to be produced after professional and scholarly specialization may have been attained to a high degree. Once the general education of the teacher tended to be conceived as mastery of that part of the general array of human knowledge that could and must be taught to children and youth. Today that limited view has been replaced by the purpose to make the teacher a person of substance and integrity, oriented to a complex and troubled world. One thing seems clear, on the basis of experience to date, namely, that adequate general education is to be attained only by perseverance throughout the period of the education of the teacher, rather than by reliance upon any neat set of required courses at the junior college level.

A third problem is the nature and extent of concentrated study in a field of learning. The strong tendency of the academic specialist is to wish to create the fledgling teacher after his own image. Whatever the merits of such a course for the prospective research worker or

university or college teacher, it seems less than completely economical or desirable as an objective for the teacher of children and youth. Yet one countenances neglect or even severe limitation of the field of specialization for such teachers at his peril, for no teacher ever seems to know enough to cope with the needs of the young, eager mind among his pupils. Moreover, the habits of the reflective, intelligent, scholarly mind are formed in young people, at least in part, through emulation of the teacher, and no teacher can be an object lesson to others who has not demonstrated to himself the power and resourcefulness of these habits in dealing with his own world. What appears essential is a careful study of the needs of the prospective teacher by academic specialists in close and mutually respectful cooperation with professional experts in education, with a view to the establishment of priorities in the use of the available time and the design of programs of concentration adapted to those needs and governed by those priorities. Such study has been started in a few places and holds much promise of common understanding for all concerned.

The development of professional understanding, skill, and artistry is a fourth area of current concern. For historic reasons this aspect of teacher education came to be left almost exclusively to specialists. While scholars and academic officers in other fields are beginning to take an active interest in the educative process and program, frequently this interest develops with naive disregard of the insights and scholarly resources of the educational specialists. No blame need be assessed—for indeed it could doubtless be shared by both groups—to make it evident that this isolation and parallel inquiry must pass and the problem of professional education of the teacher be

faced and solved in a cooperative spirit by all who share in the work of teacher education. Economy of the student's time and a considerable enrichment of his teacher education could result from a review of the total task on this basis. If the number of so-called professional courses required of prospective teachers seems unduly large in some cases, it is altogether too small in others. But the problem of the professional education of the teacher will not be solved by juggling course requirements and by pulling and hauling in a contest between faculty groups to establish even compromise agreements as to the number of courses to be approved. Entirely too much faith has been placed in particular courses in both professional and academic fields. A new approach is needed, in terms of the development of qualities of mind, attributes of personality, understanding and intellectual power, and competency to teach. The development of the person, in such terms, can surely be brought about in a variety of fairly acceptable ways.

In the fifth place, teacher education has too long hidden from view its essentially reconstructive character, both in the individual undergoing such education and, through such individuals, in the educational function of the schools. For years much has been said in America about the great function of liberal education, but all too little emphasis has been placed upon the role of the liberal mind in the work of the world. Unless the whole liberal tradition is to be fraudulently interpreted, the person imbued with it will be seen as one who believes in something and who feels that he has a personal job to do in securing certain values in the human community. Too often people have come to regard higher education as a comfortable experience of

enlarging their knowledge and adding to their marketable skills for the economy of adult life. This view tends to be reinforced by those who are alarmed about the hazards of the public function of the teacher, as if that function necessitated that he be innocuous in all controversial and fatefully significant areas of public concern and decision. It is shocking to discover how many people, even including some medical practitioners, regard collegiate and professional education as an appropriate therapeutic process for an otherwise disturbed person. If the teacher is to be educated to function in his legitimate public role, he must struggle with the hard questions of choice that face the adult community. Schools, to be more than custodial facilities and dispensaries of facts, must be manned by people who are hard at work on important questions, under a special professional discipline which commends them as mentors and guides to young people who are themselves invited to find their own way through confusion and inexperience. This struggle for clarity of understanding and dedication to high purpose is at best no quiet stroll through an idyllic woodland. Gaining new insights to replace ignorance or prejudice is frequently tumultuous business. But it is the main business of education. The community can afford to have only schools and teachers that make a real difference in the thought and behavior of people. Schools will make a significant difference in the larger areas of cultural concern, such as peace, decency, and social productivity, when the community wants them to do so and is ready to protect and encourage the teacher of originality and vision in the exercise of his seminal intellectual responsibility.

A sixth item in the list of needed developments in teacher education is the

expansion of certain types of educational research. Far too much of the program for the education of the teacher has its only justification in a kind of cracker-barrel philosophy. Too small a part of the program has been demonstrated to be both necessary and sufficient to the task at hand.

It is probably not accidental that the great public debate over education, which is so important to a free people, so often veers from its proper course, which has to do with objectives and essential amounts and qualities of the educational services to be provided. Constantly that debate tends to concern itself also with the methods and processes of education and with technical appraisals of educational products. This undoubtedly happens because educators are insecure in their knowledge of the facts and can speak with too little scientific authority and conviction regarding what educational processes are sound and indisputably effective.

Comparisons between the teaching profession and the medical profession are frequently tempting and sometimes misleading, but a comparison at this point may be instructive. Americans seem to feel enormous pride in their medical profession. Few inhibitions surround general public discussion and debate regarding questions of the availability of medical service, the price to be paid for it, the proper function of the physician in relation to all of the agencies of the community, and even the amount and type of public financial support to be provided for major fields of needed medical advance. One hears no comment from the ordinary citizen, however, or at least one finds little credence given to comment, regarding the diagnosis and treatment of tuberculosis. Arguments over smallpox vaccination or inoculation for poliomye-

litis are quickly disposed of on medical authority. One need not claim that educators should be listened to with the same satisfaction today, in order to contend that the situation in education would be much more manageable if that public service were undergirded by a comparable body of scientific fact and principle.

There are many reasons for the insufficiency of the authority of the educator, but the need and possibility of improvement in this respect are clear. It should be possible, even now, by proper exploration and dissemination of what is known about education, to dispel the wildest claims of irresponsible critics. It would be possible, by means of an organized effort to examine policy questions scientifically, to narrow appreciably the range within which choices may be made on the basis merely of tradition or preference. It seems especially urgent that this effort now be made in the field of teacher education, both for the advantage it would produce in the solution of critical problems now confronting leaders in the field, and for the training it would give to oncoming teachers in the use of the scientific experimental approach to their problems.

Finally, it may be observed that there is need for a major cooperative program among professional organizations to develop a common understanding of the task of improving teacher education and to interpret this task to the general public. Probably the necessary inter-organizational vehicles for this purpose now exist in the Council on Cooperation in Teacher Education, with its twenty-five constituent organizations, and the Cooperative Committee on Collegiate Problems of Teacher Education, with a somewhat smaller representation of groups largely in the special teaching fields. Moreover, the necessary inter-institu-

tional vehicles exist in the National Council for Accreditation of Teacher Education and the American Association of Colleges for Teacher Education.

Much of the work in developing such a program will have to be done at the institutional level, for in the constituencies of teacher-education institutions the principal "grass roots" of public sentiment are to be found. Furthermore, such a program will be tested in terms of its impact upon the regular production of teachers.

The professional house must be put in order with respect to teacher education without any implication of a monolithic approach or a party line of educational doctrine. Too often professional groups and individuals are not communicating in representations of their views to each other. Frequently they are proceeding from different and undesignated or unexamined assumptions.

Public perception of the professional program of teacher education leaves much to be desired, simply on the score of understanding. Mutual suspicion as to motives, while certainly not widespread, reveals this fact. No "Madison Avenue" sales or public relations campaign is suggested, nor would it have a ghost of a chance of correcting the distortion of view on the part of community leaders with respect to the theories of educators or the latter group's frequently strange idea of what Americans prize in their teachers and their schools.

Essentially the needed program is one of study—study of the conceptions of good teaching, of the resources available and needed for the education of good teachers, and of the requirements that are professionally defensible and publicly acceptable and supportable in the education and use of good teachers. If professional organizations and community

groups can work seriously together on these problems, there is every reason to expect them to reach agreement on a program of rehabilitation and advance in the field of teacher education as a means of implementation of immediate general educational advance. Much more generous financial support will be required in the future to expand and upgrade education of teachers. Such funds will be available when their expenditure has

been cooperatively designed and sought.

The American Community is on the threshold of educational developments which are exciting to prospective members of the educational profession who can develop the necessary vision and competency. Education for a free society is possible and freedom itself is possible, if enough people want it and work for it, even in a world beset by fear, cultural division, and confusion of values.

Professional Status: A Concomitant*

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THE literature of education repeatedly reflects implied yearnings of teachers for professional status. Bestor senses this yearning and jibes at it:

Educationists are morbidly self-conscious about the standing of their profession. They exhort one another to be "professional minded" and each feels his pulse from time to time to make sure it has the right professional beat. Beneath it all, however, lies a frightened uncertainty concerning the exact nature of a profession, and a desperate longing for palpable tokens of salvation.¹

True, there seems to have existed in the past a sort of naive faith among teachers that some cataclysmic change in public opinion, or some enlightened act of a legislative body, could miraculously create such status for them. In short, a belief seems to have persisted that professional status can and will be conferred on teachers by someone else.

SELF-REGULATION

But this naive faith and this Pollyanna belief are no longer widely held. Teachers are now realistically facing up to the

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¹ Arthur Bestor, *The Restoration of Learning* (New York, Alfred A. Knopf, 1955), p. 269.

proposition that they will have professional status only to the extent that they create it themselves. This means self-determination and self-regulation of the profession by its members. And the developing movement toward these ends, vigorous and implacable, is going to make some critics unhappier still.

The view of the National Commission on Teacher Education and Professional Standards, as reflected in its pronouncements and policies, is that status is from within the profession, not from the outside. It is not some alluring toga which a benevolent society or a considerate patron drapes about the members of the professional group. On the contrary, it is a cluster of attitudes and convictions, a welling up within each member which, when existing in all or almost all, compels respect and recognition from the lay community.

Corey has stated it another way:

Professional prestige cannot be forced, bought, legislated or stolen. In truth, it must be earned through the quality of service rendered by the members of the group.²

Thus, professional status is born within each member of a professional group as a result of a constellation of attributes: the

² Arthur F. Corey, "The Professional Standards Movement in Teaching" (Symposium, "Professional Status: How It Is Achieved"). *The Journal of Teacher Education*, 6: 225-32; September 1955.

knowledge of extraordinary competence in consequence of sustained and scholarly preparation; an inner sense of dedication to an important service to society; a serenity of spirit arising from the joy of helping others; a sense of security which is the logical concomitant of possessing competences and knowledges which others do not possess.

The term "profession" has been used so promiscuously, as Cogan has pointed out,³ that its meaning has become somewhat obscured. Also, with the development of technology demanding many types of highly skilled workers, the number of separate professions has multiplied greatly. Thus, the relatively simple criteria by which once a profession was identified have had a corresponding proliferation. There is, however, one indispensable yardstick of a profession which seems to be applied almost universally: devotion to public service. The records of teachers in this regard, even greater potentials for the future, have great meaning for the status the profession seeks.

The basic approach to professional status for teaching, at least in the view of the Commission, is through the dogged conviction that teaching must become the pre-eminent profession. Since teaching is the central lake out of which flow the streams of competence of all other occupational endeavors, surely there can be no argument about that thesis. Yet there is argument—serious, sustained, and bitter. The American people have not as yet resolutely faced up to this mandate. They must do so now; the issue can no longer be evaded. One need consider only superficially the nature of society and its rapidly increasing complexity to sense the urgency of that mandate.

Teaching can become America's pre-eminent profession only when it is able to assess for itself the standards necessary to apply to those who will be admitted to practice and permitted to continue in practice. No wonder teachers have been the targets for recurring attacks, with the prevailing inadequate requirements for certification, which range all the way from no college preparation required in one state to six years of college preparation for certain positions in two other states. No wonder, either, that the profession has been subjected to vitriolic and contemptuous criticisms when 80,000, or one in fifteen, employed teachers hold emergency certificates, a situation accompanied by indiscriminate recruiting campaigns which, in effect, resort to "knocking on any door," to "scraping the bottom of any barrel," in order to staff the classrooms. Anything to duck the reality of the cost of getting and keeping competent professionals.

Now there are vigorous proposals to correct this situation, proposals which range from converting teachers into a highly organized economic and political unit—another pressure group to enforce the profession's demands upon society—to the substitution of technology and nonprofessional helpers in order to reduce practitioners to the number the public (or the vocal portions of it) is willing to support adequately. Another proposal is pay schedules based on merit. Then there is the nebulous "master-teacher" plan, which is presumed not only to reduce the number of qualified practitioners needed but to improve the quality of teaching. All of these, it seems to the Commission, tend to be escapist measures; they are seeking an easy solution to an extremely difficult and complex problem. Perhaps all have significant contributions to make to the improve-

³ Morris L. Cogan, "Toward a Definition of a Profession." *Harvard Educational Review*, 23: 33-50; Winter, 1953.

ment of teaching, but their use basically must be predicated upon that objective, rather than upon the economy factor.

THE GRADUALIST APPROACH

If the premise is accepted that the one sure route to professional status for teaching is through the high-standards approach, as determined by the profession itself, then the inevitable question arises, How can this be done? There are two means: by a revolutionary process, or by an evolutionary process. The first would involve the overt assertion of the profession's right to fix and enforce its own standards. The second would imply the principle of gradualism.

The revolutionary process would utilize some sort of sanctions to force exclusive power over standards into the hands of the profession. The evolutionary process would depend upon the development of vigorous, effective cooperation among all segments of the profession to achieve a common goal. The Commission favors the latter process: that as the profession demonstrates its growing competence, resulting from successively upgrading standards for admission to and continuation in practice, both the public and the state legal authorities will increasingly concede its right to be judge and executioner of the standards which should be enforced to guarantee adequate service.

And here let me digress a moment. The critics quite frequently concede the pressing need for higher standards for admission to teaching. But they then equate the profession's demand for higher standards with "just adding more education courses." There is abundant evidence that this is not true. On the contrary, the reverse is reflected in the trends in teacher education and certification.

As a matter of fact, all other professions have gone through this evolutionary

process in getting into their hands the power to fix and enforce standards. And this power can be taken away from any profession, however strong it may be at the moment, when and if it begins to use its influence to achieve selfish, monopolistic ends. Hence the Commission believes that it is pursuing the wise, effective course and not—as is often implied—merely an expedient one.

The evidence of progress toward self-determination by the profession is, in some respects at least, impressive. A decade ago there was no organized effort by the profession to exercise this right. A decade ago there was just beginning to emerge here and there among the states the practice of establishing advisory committees (generally called advisory councils) on teacher education and certification, as extra-legal advisory bodies to state boards of education, relating to the determination and enforcement of standards in these important areas. In 1957, there are some 35 advisory councils, 52 state TEPS commissions, and many special committees of professional people participating in one way or another in the fixing and enforcing of standards through the state legal authorities. In fact, a recent survey indicates that in only four states has no formal provision been made by the state legal authority for such consultation.⁴ Moreover, a decade ago only about 15 states were enforcing the degree requirement for beginning teachers. In 1957, at least 37 states are enforcing this requirement for the lowest regular certificate.⁵

One may confidently predict that the

⁴ W. Earl Armstrong and T. M. Stinnett, *A Manual on Certification Requirements for School Personnel in the United States, 1957 Edition* (Washington, National Commission on Teacher Education and Professional Standards, National Education Association), p. 7.

⁵ *Ibid.*, p. 1.

time is coming rapidly when the teaching profession will have effective controls over its own destiny and services. Emergency certification, which has been resorted to by all states in varying degrees in past crises, is often used as an argument that the profession is chasing an illusory procedure in the gradualist approach to such powers. But this attitude ignores the fact that heretofore the profession has not been organized to prevent this state of affairs. Now it is, and we should see a rapid diminishing of the use of this safety-valve practice.

QUALITY OF TEACHER EDUCATION PARAMOUNT

The extent and quality of education of the practitioner are the central fibers of any profession worthy of the name. And as long as the teaching profession tolerates nondescript approaches to this principle—inadequate in length, inferior in quality, incidental in intent, devoid of professional aspects—teaching will not have status as a profession. One might assume that such a thesis would receive universal commendation and support but this is far from the case. The teaching profession has no choice but to clean house in this matter of preparation, with regard to both quantitative and qualitative standards, and to fight invincibly for rigorous accrediting of schools permitted to prepare its members, as did the American Medical Association in the second decade of this century.

And teacher education includes a whole cluster of related problems—selection, guidance and screening, certification, probationary service, and lifelong professional growth. Improvement of the quality of teacher education is the basic route to professional status.

Thus, the Commission has insisted that there must be established universally the

minimum of four years of college preparation for teaching, for beginning practitioners; that this is adequate only for initial service; that five years of preparation, at least, must be required for full professional qualification. Moreover, this preparation must be provided by institutions accredited for this purpose. And the profession, at long last, has established a national professional accrediting group—the National Council for Accreditation of Teacher Education—such as the other recognized professions have long had in operation.

This is the basic approach to status. When teaching becomes something hard to qualify for, hard to prepare for, discriminating in those certificated, demanding in the unceasing search for increased competence, ready to rid itself of those who will not or cannot measure up in competence or in conduct to the exacting demands of their jobs, then and only then will teaching have status among its own, among those yet to choose a career to prepare for, and among the public which still inclines to the viewpoint that "anybody can teach."

HIGH-STANDARDS APPROACH TO STATUS

The teacher shortage situation is a case in point. It is well known that since the outbreak of World War II the United States has been suffering from teacher shortages—the most sustained, the most critical in its history. Every kind of theory, experiment, and gimmick has been proposed to cure this situation. The Commission has steadfastly maintained that there is only one way to cure it: raise standards for the profession. Raise standards of selection, preparation, certification, and professional growth to acknowledged professional levels. As a result, the teaching profession will acquire

prestige in the minds of capable high school graduates who are facing the perennial question of what they will do with their lives. Increased enrollments in teacher education will result. Pride will be created among experienced practitioners and the dropout rate will be reduced. What is the evidence of the soundness of this thesis? There are many evidences.

First, the proportion of the members of each year's college graduating classes prepared for teaching has increased steadily since 1948, rising from 21 per cent in 1948 to an estimated 32.5 per cent in 1957. Second, with rapidly increasing college enrollments since 1954, the increase in enrollments in teacher education consistently runs ahead of the increases in general college enrollments. Third, the annual production of degree elementary teachers has about quadrupled since 1946, reflecting, we believe, the increased prestige for this field with the adoption of the degree requirement by at least 20 additional states since 1946.

Fourth, the annual production of teachers in each of the last three years has shown significant increases. In 1955-56 and 1956-57, the over-all increase was about 10 per cent each year; and for high school teachers the increase in each year approximated 15 per cent. Also, with the past year membership in FTA high school clubs more than doubled, which is a rough measure of the increase in prestige which teaching is gaining among high school students.

PROTECTING AND DISCIPLINING MEMBERS

Clearly we are on the way out of the teacher shortage. Of course there are many factors involved and it is impossible to assay precisely the predominant causal ones. But there can be little doubt that

the vigor with which the profession itself is demanding higher standards of preparation and of service is fundamental. Moreover, a profession which expects to create status for its members must eventually move vigorously into the area of disciplining its members as well as protecting them against unfair, unwarranted, and capricious actions. In other words, a profession will insist upon professional performance and professional conduct. Evidence indicates that, with few exceptions, unethical conduct of teachers results largely from ignorance of the Code of Ethics of the teaching profession, or confusion concerning the interpretation of the Code. This fact implies that full knowledge of the Code and its interpretation must be provided in the pre-service program of teacher education. The NEA Committee on Professional Ethics has been engaged for several years in developing a body of opinions which are interpretations of actual cases.⁶ These opinions, along with the NEA Code of Ethics, are widely publicized by the Committee.

But what about the relatively small number of willful violations of the Code?

Machinery for disciplining members in such cases has been established by many local associations, by most of the state education associations, and by the NEA. In the NEA structure, the Committee on Professional Ethics is charged with the responsibility for development, interpretation, and enforcement of the Code. Disciplinary action is a function of the NEA Executive Committee, upon the recommendation of the Committee on Professional Ethics.

Perhaps the most notable case handled

⁶ National Education Association, Committee on Professional Ethics. *Opinions of the Committee on Professional Ethics* (Washington, D. C., the Association, 1955), p. 72.

by the Ethics Committee resulted in the expulsion from membership in the NEA of the superintendent of schools in one of the nation's largest cities. The work of the NEA Commission for the Defense of Democracy Through Education (the Defense Commission) in protecting members of the profession has been widely publicized and covers many significant cases.

State education associations have begun to move vigorously into the field of enforcement of ethical codes and the disciplining of their membership. The California Teachers Association is a good example. In 1955, the CTA sponsored state legislation which recognized the CTA as the official representative of the teaching profession in the state, and empowered the CTA to assist legal boards in defining competence, unfitness, and unprofessional conduct. In other words, in cases involving questions of a teacher's competence or conduct a panel of educa-

tors is empowered to render a professional opinion in court, a power that the medical and law professions have had for years.⁷

The CTA considers this granting of power to the profession as evidence of the maturing of the teaching profession and as an opportunity for the profession to rewrite the old adage, "He who can, does. He who cannot, teaches" to read, "He who cannot teach, must not teach."⁸

Professional status is a concomitant—a concomitant of the will and action of the members of the group, by which self-termination and self-regulation result in service of ever-increasing quality. Such status can come in no other way. And the teaching profession now knows this and is acting upon this conviction.

⁷ Arthur F. Corey, "The Profession Moves Forward with Tenure." *The CTA Journal*, 51: 3; March 1955.

⁸ Joseph Stocker, "Teachers in California: 'He Who Can, Must.'" *The Reporter*, February 21, 1957.



REVIEWS

A History of Education in Antiquity, by Henri Irénée Marrou. Translated by George Lamb. New York, Sheed and Ward, 1956. xviii + 466 pp. \$7.50.

Greek and Roman civilization were so closely knit intellectually, so homogeneous, and so free from extraneous and distracting influences that a study of their educational systems offers us a singularly favorable opportunity to observe the effect of government and society on education and, in turn, of education on history. This study is rewarding not only because it shows us the origin of many elements in our own cultural heritage but also because the Greeks and Romans developed an educational program which they regarded as eminently successful and suited to their needs. Although conditions and goals are different now, in the study of a teaching program which kept itself in operation on its own merits for many centuries we would expect to find some help in answering our own questions.

In 1948 M. Marrou, who is now professor of the history of early Christianity at the University of Paris, published his *Histoire de l'Éducation dans l'Antiquité*, which was so successful that two revised and enlarged editions (1950, 1955) were soon called for. No comparable work is available in English, and although M. Marrou wrote expressly for a French audience, his book has now been translated, without revision, from the latest French edition and was published simultaneously in this country and in England. The work covers the period 1000 B.C.—A.D. 500, and it must be said at once that the title is a misnomer, since the book is concerned almost exclusively with Greece and Rome, the ancient orient (Mesopo-

tamia, Egypt, and so forth) being treated in three or four pages in the Introduction. A wide audience has been kept in mind, and Greek and Latin texts are translated or paraphrased.

This translation should be welcome, since it will make available a handbook which brings together in a convenient compass a wealth of material—including new research by the author—which is not readily available elsewhere in one volume and in English. The subject is vast and calls for command of a wide range of often difficult source material, and no other scholar of our day—be it said with regret—has attempted so large a task as has M. Marrou.

One should not criticize a work which has had notable success in its original form with its original audience. It is, however, unfortunate in some ways that this book, as long as it remains the only one of its kind in English, will be the work from which many students will get their only knowledge of the Greek and Roman educational system. M. Marrou's investigations are careful and conscientious, and his scholarship is of the first quality. His program, however, has not led him to pause for periodic summaries in the course of the book, or to try to bring out, as clearly and as simply as possible, the full significance of Greek and Roman education in the society and government of that time, or to point out as clearly as is necessary for the reader who does not happen to have classical training, the elements which gave the ancient educational program its distinctive quality and value in its context.

M. Marrou has performed very well his descriptive task, and the reader should not criticize him for not supplying adequate interpretation and evaluation, or for not

dealing with the questions of the value of ancient theory and practice for modern problems which American readers would hope to learn something about. Present-day students—whether French, British, or American—might be expected to be curious about such points as the characteristic limitations of the ancient curriculum, the philosophical attitude toward scientific subjects, the relationships between the schools and the state, the real causes of illiteracy (which was taken for granted), the effect of nationalism on education (a subject of basic importance in the composite Roman Empire), and the factors behind the absence of any concept of free universal education.

The significant thing is that these characteristics, which look to us like defects and limitations, were based not on theories of education, but on the contemporary conceptions of man and society. One must go back to the sources with fresh questions when one has come to understand that the whole ancient view of the nature and purpose of education was both determined and limited by the outlook which was characteristic of the times. M. Marrou, as a good classical scholar, is certainly aware of all this, but he has not brought it out as clearly as might be wished. The reader interested in these questions will find them treated on a broader basis in such books as Werner Jaeger's *Paideia: The Ideals of Greek Culture* and Donald Lemen Clark's recent *Rhetoric in Greco-Roman Education* (1957).

These comments are not to be taken as unfavorable reflections on M. Marrou's book, but rather as indications of the really very great interest and importance of the subject, and of the lessons (both theoretical and practical, as ancient teachers would say) which we can still hope to learn.

GLANVILLE DOWNEY
Dumbarton Oaks
Washington, D. C.

Professors and Public Ethics: Studies of Northern Moral Philosophers Before the Civil War, by Wilson Smith. Ith-

aca, Cornell University Press, 1956. vii + 245 pp. \$4.00.

During the postwar years writers on the American past have become more keenly aware of the rich and relatively unmined veins of material the history of education provides. In the volume reviewed here, Wilson Smith explores a significant facet of the American college before the Civil War—the teaching of moral philosophy. A standard feature of the ante bellum college curriculum, the moral philosophy course was usually required for all seniors. This course was supposed to be the capstone of the undergraduate educational experience and was frequently taught by the college president, who in those days was almost always a clergyman. It is with the teachers of moral philosophy in the Northern states, the content of the courses, and the relation between moral philosophy and secular life that Mr. Smith is here concerned.

In Part I the author sifted the background and experience of forty-eight professors of moral philosophy and analyzed the content of moral philosophy courses as revealed by the leading texts of the times. He found that most academic moral philosophers were both clergymen and professors or presidents of colleges and that a substantial majority were active participants in public affairs of various kinds. Common features found in the texts included "a picture of human nature, a map of the universe, and a version of history." Moral philosophy included much more than ethics. It was an amalgam of aspects of theology, philosophy, history, government, economics, family relationships, crime and its punishments, and jurisprudence. Mr. Smith emphasizes that theology was at the heart of the professors' concern for ethics. He also notes the passion for righteousness which runs through all of the moral philosophy texts. Part I shows in addition the great influence the writings of the English clergyman William Paley had on the development of American moral philosophy courses. The Paley vogue and its passing comprise an interesting chapter

in the development of moral philosophy in this country.

The broad themes which are introduced and explored in the early chapters and the generalizations made therein are illuminated and (the author hopes) sustained in the several biographical chapters which make up Parts II and III. The first of these is entitled "The Nature and Practice of Whiggish Ethics" and contains chapters on John Daniel Gros, Francis Lieber, Charles B. Haddock, and Francis Wayland. The latter, "The End of the Academic Enlightenment," is devoted to the Unitarian moral philosophy of James Walker of Harvard and the decline of moral philosophy in the years preceding the Civil War.

Most of the biographical chapters were published previously in journals. When they are placed side by side in a book and preceded by a general introductory section, something less than an organic whole seems to this reviewer to result. The ways in which the biographical chapters are related to each other and to the introductory section are not so clear to the reader as they presumably were to the writer.

In the last biographical chapter the thought of James Walker, president of Harvard during the 1850's, is discussed. Walker was noted for his extreme reluctance on grounds of principle to speak on political and public questions. The period of Walker's leadership at Harvard has also been described as the nadir of the history of that university. Smith's analysis of Walker and Harvard in the 1850's suggests convincingly that both have been unduly disparaged.

Mr. Smith has produced an important book on a phase of American intellectual history about which not a great deal has been written. The book raises significant questions and suggests some answers. The author would be the last to say that he has researched exhaustively and written the final word on this subject. The book impresses this reviewer as one of genuine quality, and the American Historical Association has awarded it the Beveridge Prize

for 1956. It is not an easy book to read, but it is one which will amply reward the efforts of the persistent reader. It is on the whole well written and contains excellent footnotes which not only help explicate the text but also provide numerous suggestions for further research in the educational and intellectual history of the United States.

FREDERICK H. JACKSON

Carnegie Corporation of New York

Crisis in Higher Education, by Charles P. Hogarth. Washington, D. C., Public Affairs Press, 1957. vi + 60 pp.

Mr. Hogarth has a twofold purpose in this pamphlet: to develop among laymen *understanding* of our colleges, their place in our society, their ways of functioning, and the problems they face; and to stress the need for *planning now* to meet society's need for higher education in the future. Only through such understanding and planning, the author tells us, can the coming increases in enrollment be accommodated.

The volume seeks to introduce laymen to the American college—its purposes and policies, its finances, its physical facilities, faculty, and staff, its student body, its program (curricular and extracurricular), and its relationships with alumni and with the public. The author believes that "a college can be no greater than its faculty because the ability of faculty members to teach effectively determines, to a large extent, the amount and quality of learning that take place in an institution." He knows well that "the enthusiasm of a faculty member for his subject impels students to want to know more about that subject."

Mr. Hogarth also reminds us of other facts that bear repeating: Curricula are varied; they are frequently designed to promote education "for home and family living, responsible citizenship, and responsive living" as well as "the art of making a living." It is important that students choose the right college, and it is a college responsibility to assist them. Student life should be

enriched by extracurricular activities "under the guidance of highly trained and thoroughly experienced adults." Physical facilities should serve the needs of program, and for each college there should be a master plan to guide development through the years. "Simple architectural beauty with good equipment and long lasting equipment should characterize college physical facilities." Finally, "it is the responsibility of every college to tell its story in an effective way not only to the alumni, but to the public as a whole." All available means should be utilized: speeches, publications, trustees, alumni, community relations, students, and staff.

The author bespeaks the efforts of citizens, cooperations, and local and state governments to support higher education adequately. If this appeal proves inadequate, then a broad-scale federal policy for scholarships and loans for institutional facilities is deemed desirable. But the author adds, "It will be another tribute to the effectiveness of this democracy if the problem is solved without additional federal assistance."

It is on the basis of understanding that Mr. Hogarth expresses the hope of expediting necessary plans for future development. As a basis for such plans, he stresses the need for facts—facts about the people served, their present and future needs, trends in employment, the success of graduates, the programs and plans of other institutions, and the characteristics of present college facilities. There follows wide-scale communication and discussion of the facts, from which fruitful suggestions emerge. Long-range plans should be based in defined objectives and functions, and should include plans for program, facilities, personnel, and finance. And important as is planning for particular institutions, planning at the local, state, regional, and national levels calls for equally vigorous attention.

Only as *understanding* is reached, as *plans* are made, more *money* is made available, more *teachers* are secured, and more *facilities* are provided, can the "crisis in higher education" be met.

Mr. Hogarth's book is both important and timely. If there are limitations, they appear in somewhat inadequate discussions of adult education, provision for organized research and services, the need for statewide and regional planning for coordination and allocation of institutional functions, and the requirement for increased institutional support from public state funds. Mr. Hogarth does not provide evidence for his statement that federal aid will not be needed, and he ignores the implications of the present heavy burden on enrolled students and their families for sound fiscal policy. However, one might expect that such matters will surely receive the attention they require once the author's two major goals of *understanding* and *planning* are achieved.

THAD HUNGATE

Teachers College, Columbia

College Freshmen Speak Out, by Agatha Townsend. New York, Harper and Brothers, 1956. x + 136 pp. \$2.50.

This is a story told by 470 college freshmen from 27 different colleges and universities in terms of what their first year in college is meaning to them. The study is addressed to high school students who are considering college, to administrators and teachers in schools and colleges, and to those who hope to understand more fully the present college generation.

The report indicates that more than half of these college freshmen are enthusiastic about their work in college and that a third of the remaining number view it with mixed feelings but in general are satisfied with what they are doing. However, about one out of five freshmen express dissatisfaction with their college work for a variety of reasons.

At other times in the history of American higher education it would have been easier to dismiss the reaction of the 20 per cent who respond negatively to the college experience and to feel satisfied that at least half the freshmen were enthusiastic about

their college work. Two factors in particular make it difficult to adopt that attitude at the present time. First, the limitations of funds and of facilities available to colleges prevent substantial numbers of American youth from going to college. For those who do go it is imperative that as large a proportion as possible profit from their work. Second, there is a rising demand for trained leadership to sustain our nation as a leader in technical progress and as a vital political center of the world, at the same time that a declining proportion of our population is of the age to work most productively in our society. Forecasts prepared by the United States Bureau of Census indicate that by 1975 there will be a 40 per cent increase in the total population of the United States who are over fourteen years of age. Both the younger and the older extremes of this population group will increase markedly. Among those who will be twenty-five to forty-four years of age at that date there will be an increase of only 17 per cent. Thus we are obliged at this time to cultivate the development of youth with care and discernment if we are to produce the leaders which our economy will demand in the foreseeable future.

The data for this study were obtained through the use of a questionnaire which consisted in part of requests for specific opinions of freshmen about problems with which they were having difficulty and in part of opportunities for students to comment freely on such questions as What comparison would you make between your high school and college work? To what extent do you think the college provides adequate counseling? How could your secondary school have helped you more in anticipating and meeting the adjustment problems of the freshman year? Because of the brevity of the questionnaire and because of the rather obvious wording of the questions, one has the feeling that little has been discovered in this study which discerning high school and college teachers do not already know. However, the responses are organized and analyzed well. This is an important

contribution, and the book deserves to be read for that reason if no other.

In a final chapter called "Assignments for Tomorrow," specific suggestions are made regarding the educational program, school and college relations, selection and admission, orientation, and student-planning. In general the suggestions are sound and provocative. This reader was impressed that the suggestions for student-planning offer formulas for success rather than concise and stimulating ideas for the high school student who is considering college.

To many the most challenging part of the book will be the discussion of the lack of understanding among college students of the purposes of organization and prescription in the curriculum. Student reaction to the prescription of freshman courses was "negative, serious, and discouraging." High on the list of sources noted by freshmen as the bases of their academic difficulties was "little interest" in their courses. Women in colleges reacted more negatively to first-year courses than did men.

Two areas for action by colleges are suggested by these data.

1. In those colleges which offer general education in the freshman year the student is often plunged into the courses without any adequate discussion of either the purposes of general education or the specific ways in which the college has developed its curriculum. To quote one freshman, "How would you like to enter college, hoping finally to select your future course of life, only to find that you had to take Western Civilization, or some such subject?"

Only a few students in Dr. Townsend's sample were in colleges where continuous effort was made to describe and explain the rationale of the course prescriptions. One freshman who was in such a college said, "I am in an experimental core curriculum here that cuts through many subjects, and I find it most stimulating. Our work includes discussion of how the curriculum can be expanded and improved in the future."

2. The lack of articulation and understanding between colleges and secondary

schools is reflected in the student responses. The high school student has little opportunity to become acquainted with the purposes of the college which he hopes to attend. In many cases his choice of a college is based on casual and inadequate observation, influence of his family, or newspaper accounts of public events and sports contests in which the college is involved.

In spite of the substantial nature of the criticisms by the freshmen who report in this book, there is clear indication that for many students college is exciting and stimulating. The fact that the student is "unadjusted" is both a measure of the frustration which he feels in being inadequately prepared to take advantage of college work and a measure of the challenge which college presents to him. Perhaps the principal criticism of Dr. Townsend's presentation is the emphasis on "adjustment." One might wish that all college students were "unadjusted" in the sense that they were in a new and stimulating experience which required the reorientation of attitudes and study habits and which stretched their minds and imaginations to the limit.

MAX WISE

Teachers College, Columbia

Intelligence in the United States, by John B. Miner. New York, Springer Publishing Co., Inc., 1957.

This book presents findings on a vocabulary test administered to a representative sample of our population, a rationale for extrapolation from this test to a broader interpretation of abilities, and a plan for a different utilization of intellectual potential in education and employment. It contains excellent surveys of the literature on many aspects of intelligence, and numerous interesting and challenging new findings.

On the assumptions that test performance will result from the interaction of native potential, motivation, and environmental stimulus potential, and that there is

a high correlation among abilities, with verbal ability being highly rewarded in our culture, Dr. Miner proposes that minimum criteria for various occupational levels be set up on the basis of verbal ability, with more specific skills being differentiated within a given level.

The survey seems admirable in all respects. The sample was carefully selected to be representative of census data. The vocabulary test was well-suited to this type of study. The results concerning the relationships between intelligence and social stratification are significant and challenging to the social scientist; the section on the Negro led this reviewer to speculate concerning the possibly different results of a similar survey after fifty years of integrated education in the South.

The most original and controversial section of the book is the application of the findings to educational and occupational reform. By taking the scores of students nine years of age or older and plotting the distributions of scores of those in the ninth grade or below, in the tenth through the thirteenth grade, and in the fourteenth grade or above, Dr. Miner found considerable overlap in his distributions. He concluded that all those with vocabulary scores exceeding the tenth percentile of the next higher educational group possess at least the minimum ability for educational placement in the higher group. Thus he finds that 54.6 per cent of the student sample are undergraded intellectually on the basis of age placement, and he breaks this figure down into percentages for the various social groups he has previously mentioned. On the basis of this he recommends a revision of our educational system which would base grade placement upon intellectual potential rather than upon age, requiring promotion of some and demotion of others. A similar scheme, based upon the same rationale, is presented for occupational placement and training.

While Dr. Miner recognizes the importance of such factors as personality differences and social and emotional develop-

ment, any scheme aimed at utilization of potential which emphasizes the use of individuals for society is likely to underemphasize self-fulfillment needs of the individuals being utilized. While Dr. Miner's suggestions do not violate the individual, as do many such schemes, in the reviewer's opinion they do not give enough consideration to such factors as family tradition, unconscious motives as expressed in educational and occupational choice and achievement, developmental readiness outside of, but related to, intellectual functioning, the injury to self-esteem of demotion, and the like. It would indeed be interesting to try to implement Dr. Miner's plan in a given community, and to study its results from a longitudinal point of view. If increased individual satisfactions and increased contributions to society were both to result, it would be worth changing the current approach to educational and occupational placement.

ROSALEA A. SCHONBAR
Teachers College, Columbia

The Student Teacher in Action, by Sam P. Wiggins. Boston, Allyn and Bacon, Inc., 1957. xii + 217 pp. \$2.95.

Sam Wiggins' conferences and student-teaching seminars have long been characterized by tolerant understanding and good-natured common sense. The informal conversational style of his writing retains these qualities to a marked degree. Student teachers are told simply and directly the things which they need to know. At the same time, however, they are encouraged to give thoughtful consideration to the many problems they will meet and the decisions which must be made.

The Student Teacher in Action is difficult to classify by usual standards. It makes no attempt to deal in a comprehensive manner with curriculum organization, methods, or materials as do many conventional books for the student teacher. It differs from the locally produced student-teaching hand-

book, however, in its far greater emphasis on general principles and guides to action which must be applied by the student in a local situation. In a Preface addressed to the student, Professor Wiggins states, "The aim of the book is to help you see quickly your total responsibilities and to aid you in discovering courses of action in meeting those responsibilities adequately." This purpose is evident throughout the volume.

The three sections of the book deal generally with the three major responsibilities faced by student teachers—developing personal-social relations, achieving teaching competence, and acquiring professional status. Situational materials, illustrative incidents, frequent summaries, and evaluative or diagnostic questions are used constantly to increase understanding and to promote the application of principles to particular situations.

The position of the student teacher is a difficult one at best. Like a second cook in a kitchen where one has been accustomed to operate alone, the student may find it much easier to "spoil the broth" than to achieve smoothly operating cooperative relations. This problem is dealt with in a frank and practical manner. Among other things the student is told, "Do not permit, let alone engage in, destructive comments that reflect discredit on your cooperating teacher. This is both unprofessional and shortsighted." But there is no suggestion that the student should become a yes man, echoing at all times the opinions of others. "You should," he is advised, "cultivate the process of expressing your views in such a way that they have an impersonal tone. In short, it is possible to disagree without being disagreeable."

In the matter of personal appearance some degree of conformity is encouraged and it is noted that "any striking appearance, such as a close fitting sweater on a young lady, or a young man sporting a mustache with sideburns, could easily give a distracting first impression." At no time, however, is it suggested that the student should cease to be a normal person because

he has chosen to be a teacher. In a discussion of marriage and teaching the student is advised, "On the one hand, you need to guard against letting out-of-school interests interfere with your performance as a student teacher. On the other hand, you cannot afford to let student teaching blot out other interests in your personal life, including romance." This is a refreshing contrast to the not uncommon point of view that the student should give up all other activities and social contacts in order to concentrate on his student teaching. Often, as an unanticipated by-product, he gains some strong impressions of his future profession as one which demands inhuman sacrifices and drudgery.

Ways of controlling the pupils whom they will teach is a major concern of all student teachers. In a brief section called "Discipline: A Respectable Word," Professor Wiggins builds a point of view regarding this important aspect of teaching that is both practical and idealistic. A few lines will give the essence of his thought:

As a democratic teacher, you are both a counselor who helps pupils understand and control themselves and a policeman who enforces the rules that govern your miniature neighborhood, the classroom. The more effective you become as a guide of learning and as an understanding counselor of individuals, the less often you will need to assume the role of policeman. You should not feel, however, that you are suddenly undemocratic when you need to be firm in enforcing reasonable standards of behavior. Our democracy would not last for long if there were no external controls over the individuals who have learned little about self-discipline. Do not apologize or feel guilty about doing the things that need doing, but do not take this license to give vent to your vexations. Let thought guide your actions in the matter of discipline rather than any mechanical rule of thumb.

The discussion of the citizenship responsibilities of the student teacher begins with the statement that "as a teacher, or as a student teacher, you have every right outside of school that all teachers enjoy." It then goes on to delineate the rights and responsibilities of the student teacher in the

community. It is most gratifying to find that student teachers are advised to function actively as citizens and that participation in community affairs is encouraged. There are none of the warnings and limitations which often have the effect of making the young teacher feel that he must neither have nor express opinions on controversial issues. A student teacher who writes a letter to the local newspaper concerning a community problem or expresses his opinion on issues in local politics may occasionally be criticized or misunderstood. In the long run, however, students who accept their responsibilities as citizens will be more effective teachers as well as participating members of a democratic society.

Ideally, the material presented in this book should be the subject of frequent seminars or long individual conferences. Since few things in education are ideal, however, and the supervisor of student teaching usually has too many students and too little time, this book provides a needed do-it-yourself approach to the problems and concerns of the student teacher. Certainly any student is bound to find here much that is helpful, thought-provoking, and inspiring.

DOROTHY M. McGEACH
Teachers College, Columbia

The Teacher's Personal Development, by
W. F. Bruce and A. J. Holden, Jr. New
York, Henry Holt and Company, 1957.
352 pp. \$4.25.

A book on this subject should attract readers. Currently, understanding the behavior of children as well as of adults is a prime concern in education. Ever since Freud broke through the emotional barrier there has been a growing interest in understanding the implications of his research for education. Much has been and continues to be written on understanding children's behavior. More recently, the focus seems to be including attention to the teacher's understanding of himself. The reason for such

concern is clearly given by Jersild in *When Teachers Face Themselves*, "A teacher's understanding of others can be only as deep as the wisdom he possesses when he looks inward upon himself."

In *The Teacher's Personal Development*, Bruce and Holden set out to point the way "to able and effective teaching through the approaches of self-understanding and interpersonal relations in their total effect upon the personalities involved." This is a big order. The teacher's resources from his own childhood, youth, and college years are examined as they bear on the many and varied situations he meets in schools—some authoritarian, some democratic. In this plan, key concepts of child and youth development are examined, now with the camera on the youngsters before the teacher, now on the previous life of the teacher, now on a classroom or school-wide situation. This organization of content, which is consistent with the two-way purpose of the authors, namely to help teachers to achieve better self-understanding through better understanding of the youngsters they teach and as a result to do a better job of teaching, leads to a feeling at some points that one is reading a book on child development, and at others that one is skimming rather lightly over complicated problems involving the teacher's emotions. The authors have outlined with care many problems both in teaching and in personal development, but often the organization gets in their way.

The difficulty of getting at the meanings is aggravated by the style of writing. An author who wishes to help his readers understand themselves must create the desire and the emotional state to achieve this goal. His style must of necessity get the reader "into the book." In some spots, chiefly in the section dealing with the adolescent, this is almost accomplished. But in general this is a book which many readers will find it difficult to get into. Sentences such as, "Oversimplifying, we can say that the way we act is so much an expression of the way we feel that the harmonizing of energetic action with abundant emotional living

is an ever present problem," or, "There is a subtle perception of the other person's attitude and point of view with an individualized adjustment of one's conduct thereto that is indefinable," are not stumbling blocks, they are block busters. A person who meets this style when he is struggling with an idea related to himself cannot be blamed if he fails to muster up the courage to chisel through this verbal obstruction in addition to his own inner resistance.

Bibliographies of films and readings are included after each chapter. Those of films are excellent and should prove very helpful to a teacher who uses this book as a text with pre-service teachers. Although the authors indicate that *The Teacher's Personal Development* offers help to experienced teachers who wish to deepen their insights, it is primarily a textbook.

ROMA GANS

Teachers College, Columbia

In-Service Education for Teachers, Supervisors, and Administrators, the 56th Yearbook of the National Society for the Study of Education, Part I. Chicago, University of Chicago Press, 1957. xiv + 376 pp. \$4.00.

This yearbook has an interesting plan of organization which allows both for wide participation in the preparation of the book and for adequate coverage of the major dimensions of in-service education of the teaching profession today. The expansion of the original yearbook committee of five people to include sixteen contributors and seventeen additional collaborators should assure the reader of a wide range of experience and outlook on in-service education, and illustrate a basic principle of in-service education—the widespread involvement among representatives of various levels of the educational enterprise.

Section I is a good treatment of the need, history, and characteristics of in-service education. It is distinguished particularly by a stimulating chapter on "Psychology of

Change Within an Institution." The authors of this chapter, Coffey and Golden, skillfully draw from the dynamics of individual and group behavior those elements which are central to an understanding of educational institutions, and to the exploitation of the institutional setting to effect educational change.

"Resistance to change," they say, "is to be expected at any level. Unless there is resistance, it is doubtful whether institutional change can endure or individual change can go very deep. Change is less threatening and, indeed, may be more validly tested if, in the beginning, while involving all levels of the institution, it can be placed upon an experimental basis to be evaluated as a part of an action-research program." (p. 102.)

In Chapter V, Parker gives twelve guidelines for in-service education which may be helpful to persons involved in planning and evaluating programs of professional improvement.

For this reviewer, Section II provided the most interesting reading. In this part are recorded the reactions of groups of teachers, administrators, and supervisors to Section I. The chapter by the teachers is especially refreshing in its down-to-earth quality. For example,

Before someone makes a little shrine before a free-form mass dubbed a "group," let's admit that as educators we tend to be a little carried away by the whole "group" idea. Suddenly alerted to the power inherent in co-operative action, we often approach it as a method or a technique and forget where the method or the technique is supposed to take us. (p. 137.)

Section III of the book is devoted to a discussion of the extent and nature of local, area, state, regional, and national in-service programs, with particular reference to the existence or absence of the guidelines suggested by Parker in Chapter V. The reader is helped to see both applications and further implications of these guidelines. The fact that many times some of these guidelines are absent in the programs studied does not undermine their validity as guidelines, but suggests that improvement programs could

be more effective if these principles were followed more generally and consistently.

Section IV rounds out the treatment of in-service education by giving attention to organization, evaluation, and training for carrying on instructional improvement. Here we find much suggested material from a number of disciplines, drawn together for a focus on the job of educational leadership. These chapters provide a capstone for this persuasive book to which one must give agreement for the most part. Within the last three chapters are found the crucial elements which make for success or failure on the part of those sincerely committed to educational improvement. Miles and Passow hypothesize on the alternatives of success or failure in the following last sentence of the book:

If program planners and participants give careful attention to locating gaps in the teacher's preparedness for instructional services, to planning and carrying out meaningful training experiences, and to research on the effects of the experiences, *then* the in-service program will go deeper and farther, and educational experiences of boys and girls will be improved. (p. 367.)

PAUL M. HALVERSON
Syracuse University

An Experimental Study of Arithmetic Problem-Solving Ability of Sixth Grade Girls, by Sister Mary Dominic Engelhard. Washington, D. C., The Catholic University of America Press, 1955. 62 pp. \$1.00.

An Experimental Study of Arithmetic Problem-Solving Ability of Sixth Grade Boys, by Sister Mary Camille Kliebhan. Washington, D. C., The Catholic University of America Press, 1955. 51 pp. \$1.00.

As the reviewer read the two reports of doctoral studies, he was reminded of the story about the blind men and the elephant. You recall, each man touched a different part of the elephant and came away with an

inference concerning the whole elephant. Each blind man's analysis of what he had examined was correct, but the conclusions concerning the whole were grossly in error.

It is the whole view that is missing in so much otherwise good educational research. What is needed is a team of researchers to investigate educational problems. Each member of the team would bring to the project his special knowledge. Pooling of these special knowledges could lead to a better, a more adequate description of the problem under investigation. More facets could be considered because more specialized knowledge would be brought to bear on the data. Operations research techniques applied to educational problems are needed.

These two investigators carried out an intensive testing program—seventeen different items—on a large sample of boys and girls in sixth-grade classes. They used acceptable statistical methods to analyze the data. The reviewer does not criticize what happened *after* the data were collected. He quarrels with what happened *before* the

test program began. Were questions such as target population or sample population considered? Was consideration given beforehand to what sort of data collecting would yield the most information? Were various statistical designs studied to see which one might yield the most penetrating information? Was consideration given to textbooks? To teachers? To socioeconomic status? To out-of-school experience of the children? And if all or some of these questions were considered, what was the rationale for the decisions reached? No evidence of such thinking appeared in the published reports.

The studies' conclusions are obvious: "High achievers are significantly superior to low achievers on all tests at the 1 per cent level of confidence," except on one test. Or, boys and girls behave alike with respect to problem solving. Such results of research have little impact.

MYRON F. ROSSKOPF
Teachers College, Columbia

COLUMBIA

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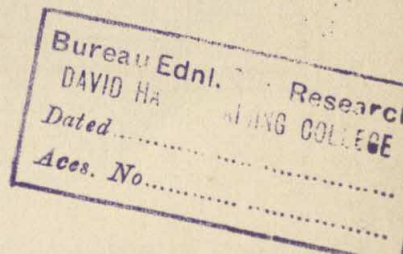
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TEACHERS COLLEGE RECORD

Great Challenges for Education*

HOLLIS L. CASWELL

PRESIDENT, TEACHERS COLLEGE, COLUMBIA

OUR people and our country face awesome tasks and responsibilities in the decades ahead. Let us take a quick look at some of the great challenges we must meet.

1. We must learn to live with great uncertainty and with ever-present danger in our international relations, maintaining confidence and moving step by step toward achievement of a durable peace. This is a goal men have long sought unsuccessfully but a new urgency is now given this problem, for the alternative is a war of destruction, awful beyond imagination.

2. Somehow people of various cultures who hold different values and have markedly different customs must learn to live side by side in harmony and with mutual respect, dealing constructively with problems which inevitably inter-

twine their destinies. This will be extremely difficult to achieve, for history is replete with illustrations of neighbor fighting neighbor for generation after generation. In this great and complex task of achieving intercultural understanding and cooperation our people and our country must lead.

3. We must discover how to use atomic energy to foster the well-being of mankind. The extension of its use involves not only the most intricate technical problems but far-reaching questions of public policy and economic development.

4. Automation promises a second industrial revolution, or if you prefer, the extension of industrialization to its ultimate development. Machines replacing men to an extent we can hardly imagine present demands for technical competence far exceeding those we now must meet. To operate the increasingly vast and complicated system of economic production in the years ahead will require that a greatly increased proportion of our

* This article is based on an address delivered July 4, 1957, at the Centennial Meeting of the National Education Association in Philadelphia.

people achieve mastery of intricate, high-level skills.

5. As machines replace men, less and less work time will be required to produce the materials we need. The present forty-hour work week which only a short time ago seemed almost utopian, will continue to move downward in the foreseeable future to thirty-six and even to thirty hours. For millions of people the job no longer dominates their lives, and it will do so for fewer people in the years ahead. To what ends shall the substantial time that is freed be devoted? This is a question of great seriousness. Unwise use of this time could undermine our people and our country; wise use could enrich living beyond imagination, providing an opportunity for large numbers of people to experience the deeper values of the mind and spirit which in the past have been reserved for the favored few. At the same time, demands on many professional workers have increased, so that once favored groups find themselves with the heaviest work loads and least opportunity for leisure.

6. Our world today is characterized by a pervasive sense of insecurity and purposelessness. Many persons question the basic goals of life and countless numbers are emotionally disturbed and mentally unstable. There is on every hand evidence of a need for clearer understanding of and commitment to values which make life a great adventure eminently worth living.

7. The extension of mass organization in many aspects of our life threatens submergence of the individual. There is danger that American society, which in the past has been distinctively mobile, may become more rigid. There is reason to believe that more and more people are seeking security in conformity to groups. Should these tendencies become domi-

nant, our national ideal of providing opportunity for individual initiative and development would be undermined.

These seven challenges indicate that we have a tremendous task ahead, probably the most difficult one our country has ever faced. But it is imperative that they be met if our people are to move forward into a hopeful and better future. Whether or not we succeed depends more on education than on anything else. Military and economic strength give us current dominance, but in the final analysis lasting solutions to these problems will be achieved only through an education that cultivates greater understanding of man in the modern world, fosters firmer devotion to our basic ideals, and evolves more effective means for their achievement under the new conditions of an atomic age.

Consequently, as we look to the future and ask what kind of education we should have we must direct our thinking and plans to meet challenges such as these. The import they have for education can only partially be comprehended, for their influence will be pervasive, powerful, and of long range. However, we must make projections of desirable lines of development, testing each step ahead by its actual results in experience. I shall indicate four broad requirements which I believe education for the future should meet, and point out what seem to me to be some dangers and limitations in certain current educational practices and trends.

REQUIREMENT I: *All of our people must have an education which provides a balanced and interrelated emphasis on general or liberal objectives on the one hand and on vocational or professional objectives on the other.* One of the strong features of American education has been the extent to which it has sought

to meet this requirement. There have been marked differences of opinion regarding relative emphasis, but fairly wide agreement to the proposition that all students should receive an education which meets both general and vocational needs.

At present, however, there is increasing evidence of a desire to divide the two. In many suggestions there is the implication that the intellectually talented should have their work restricted to academic fields and that those destined for skilled and semiskilled jobs should have programs largely of a vocational nature. The most extreme illustration of this is the proposal by Rear Admiral Rickover that children with IQ's above 115 should be separated from other students at ten or eleven years of age and be educated in different schools. The program for this group should be "purely academic" to use his words. The inference may be drawn that education of the remainder should be largely vocational, since he recommends patterning the program on the traditional European plan.

At the college level this issue becomes especially acute. Some leaders in the liberal arts insist that vocational and practical concerns undermine liberal education. Recently at a meeting of parents of freshman students in an outstanding college of Arts and Science one parent asked a professor to what uses their children would be able to put their education. The professor replied with great emphasis, "None whatever! If you are concerned with your boy getting something he can use, you should not have put him in a college of Arts and Science!" This seems to me to reflect an attitude too frequently found among professors in the liberal arts and even among high-school teachers of the academic subjects. There sometimes seems actually to be a fear that

students will gain something from their study that they can turn to practical use. This can be as stultifying as the opposite attitude, which interprets the demands of modern technology on education as increasingly narrow technical specialization.

The needs of the future call for a type of general education which will have very positive values in the lives of all students. Questions centering on the purpose of life, the way life can be lived most meaningfully, the relation of the individual to other individuals and to social institutions, the understanding of conflicting values and cultures are but a few points on which contributions are needed and should be made. A number of scholars of the liberal arts themselves are critical of what is being achieved and of the direction much liberal study is taking. J. P. Corbett, a reader in philosophy at Oxford, recently stated in an address over the BBC:

To study Latin and Greek was an admirable thing in the absence of an intellectual tradition and a literature of our own; to perpetuate that study was natural when it had become a part of the conventional apparatus of the ruling class. It was also natural . . . to try to do for English and the other modern languages what had previously been done for Greek and Latin. But natural as all this was in its time, it does not seem to me to make much sense as an education for the mass of our young people now. . . . we should be teaching young people to think about the world, not to talk themselves out of it; to work through concrete problems of nature and society, not to drop a verbal curtain between those problems and themselves.

The challenges I have mentioned suggest clearly the need for both more effective general education and increased technical competence. I would consider it most unfortunate if these needs were dealt with by restricting the education of

an intellectual elite to academic fields and of those preparing for technical work to a vocational program. In our country, it seems clear to me, every person needs to have both a good general education and preparation for his lifework. The wisdom and special competencies of the mass of our people will in the long run determine our future.

It is my view that general education must be so broadened and its standards must be made sufficiently flexible that all persons with ability to deal with ideas—and this means the great majority of our population—will find opportunities to achieve to some degree the goals to which this phase of education is directed. The application of artificial standards to restrict opportunities in general education can have only one outcome—a lessening of the total wisdom and insight of our people, a result our country can ill afford in the time ahead.

Further, it is my belief that the parallel but related development of general education and education for lifework will serve to enlighten and make both more meaningful. Contrary to many suggestions there is no hard and fast line between the two. At point after point they merge and interrelate. As preparation of larger numbers of our people for technical work is required it will be highly desirable to relate this preparation to the broad stream of education to be a man, a citizen, and a member of a home.

REQUIREMENT II: *Education must become increasingly effective in influencing the behavior of students.* Many years ago John Ruskin wrote: "Education is not teaching people what they do not know; it is teaching them to behave as they do not behave." Yet down through the years schooling has been overwhelmingly devoted to teaching students what

they do not know. The faith of the rank and file of teachers in the value of memorizing facts and definitions is amazing. "Learn the causes of the American Revolution," "Define a noun," "Give the formula for sulphuric acid," "Take the next ten pages for tomorrow." So goes too much of our teaching.

The kinds of problems we have been facing as a people and a nation and those we will face in the future require an education that leads people to act differently than they otherwise would. For example, if the challenges in the international field are to be met successfully, our people generally must have guided experience in education which will cause the actions they take that influence people of other cultures actually to reflect greater understanding and appreciation of those cultures.

As one approach to this problem, emphasis on modern foreign languages may advisedly be greatly extended. But not language teaching centered primarily on grammatical structure and superficial command of a few elementary language skills. Rather, methods of teaching should be devised and types of experience provided which will make the student aware of the language as a means of communication among people and which will truly increase his insight into the characteristics of other peoples and their culture. Means should be found to provide direct association with people with other cultural backgrounds and to establish realistic contact with the cultures they represent. To do this will require imagination and inventiveness; yet it is the kind of thing which is essential in meeting our responsibilities of the future.

There needs to be a systematic long-range effort to interpret educational objectives in behavioral terms. The Educational Testing Service is making an

important contribution to this problem through studies which define behavioral objectives for elementary and secondary education.

But the most difficult task remains to be achieved—the devising and introduction into teaching practices of procedures which will lead to the desired developments in behavior. It is all too easy to accept new objectives verbally and then insist that old methods and content which we have been using all the while will serve the new purposes. Some of you will recall the frontispiece in one of the early books on Principles of Education which read as follows:

Greeting his pupils, the master asked:
What would you learn of me?

And the reply came:

How shall we care for our bodies?
How shall we rear our children?
How shall we work together?
How shall we live with our fellow-
men?

How shall we play?
For what ends shall we live? . . .

And the teacher pondered these words, and sorrow was in his heart, for his own learning touched not on these things.

Many a teacher who faces the challenges of education for the decades ahead and asks honestly how he can teach so as to improve the behavior of pupils will find to his dismay that "his own learning touches not on these things." We must seek new knowledge and develop more effective means of making education a vital and guiding force in the lives of our students. In a world that moves as fast as ours we may never safely accept without question what we are doing in the present as adequate for the future.

REQUIREMENT III: *Education in school should become increasingly concerned with developing attitudes and*

methods of work which lead the individual to continue his education throughout his life. Many educators over the past several years have been deeply concerned with the great diversity in the educational program. They have felt the need for some common core of knowledge that would mark the educated man, as was true in earlier times. Various means have been proposed to achieve this end. More and more colleges have reduced electives and have prescribed an increased number of common courses. There is a tendency to move toward a greater number and increased uniformity of requirements in high school.

The plain fact is that the diversity which has characterized education is a reflection of the culture in which we live. Knowledge is extended so greatly and increases so rapidly, conditions of life change so fast, and the problems we face are so varied that there is utterly no hope of achieving solely through formal agencies an education adequate to our needs. Our people will become able to deal with the unpredictable effects of powerful forces such as automation and atomic energy only as they continuously educate themselves to understand the influence these forces exert on their lives and on the future of our country. The most important outcome of formal education today, when we look to the great challenges of tomorrow, is the development of attitudes and methods of work which will cause the individual to continue his education so that he will at all times bring the tools of the educated man to bear on his present problems.

There are bound to be tremendous gaps in the education of every individual in the modern world. There is simply too much to be known, there are too many complexities to modern life for any individual to comprehend. Thus we must

select those things which at a time and in a given setting hold greatest significance, and use them as a means of reaching toward the unknown of the future.

It is my opinion that at present there is a tendency to place too great emphasis on developing a common body of knowledge in comparison with cultivating attitudes and methods of work that cause the student to meet whatever situations he may face with thoroughness and competence and appreciation. It is far more essential that a student have real appreciation of a few selections of good literature, that he develop the habit of reading for enjoyment, and that he achieve a sense of confidence in his own taste than it is that he cover the works of a prescribed group of writers. It is far more important that he have the experience of analyzing and dealing thoroughly with a few of the most important social problems than that he have a smattering of information about a great many. At best he can only sample the vast accumulation which our culture represents. That sampling should be such as to make him forever a student. This will give greatest assurance that as our people and our country face the great challenges of the future we will bring the resources of education to bear on their solution.

REQUIREMENT IV: *Education should be so conducted that the individual and his development are the constant focus of attention.* The challenges I mentioned earlier in this discussion involved a threat to one of our basic national values: the threat of submergence of the individual person in mass organization. They also implied the great need for individual initiative and leadership and for improved person-to-person relationships. In fact, the basis of our concept of democracy is the independent, deliberate,

informed, and altruistic judgments of individual citizens on matters of public policy and personal action. If this base should be undermined, our entire way of life would be threatened.

Education has been a chief means of fostering these desirable qualities. While we have had *education for the masses* in America, we have always striven to avoid in so far as possible *mass education*. Over the years in our schools various devices have been used to adjust to the individual student and to give the kind of personal attention that makes him feel he is valued and considered as a person. The guidance movement has been a major expression of this concern.

In the final analysis the personal relations of teacher and student is the critical factor in this regard. Recently I received a letter from a college student in a large university. In telling about her work she wrote:

Wednesday night we had Miss Reeves, who has been such a guiding light to me, over for dinner. She has done so much for me and I surely appreciate it. A few teachers like her can make college so much more worth while, especially here where you seldom get to know your teachers.

Teaching is to a significant degree an art, and the better the teacher the more this is apparent. Many outcomes of teaching may be related quite directly to specific teaching procedures, but some of the most significant influences of fine teachers are very subtle in nature and rest largely on the direct personal relations of teacher and pupil. For example, the power to stimulate the pupil to high endeavor, to help him grow in his appreciation of himself and of others, to lead him to develop a spirit of inquiry, to create the drive to continue his education, to develop a sense of beauty and an appreciation of the mysteries of the world

in which he lives—these are qualities which must be cultivated pretty largely by the teacher through a multitude of small actions in day-by-day association with the pupil.

Consequently, as we look to the future, it seems to me we should bend every effort to see that the personal element holds a large place in the process of education. Many institutions today are weak in this respect and promise to be even weaker as enrollments increase. There are too many cases in which students do not have the sense of personal interest and direction from teachers. Especially is this true in large institutions. Many college students go through their freshman and sophomore years and some even further without receiving any indication whatever of personal interest and guidance from the faculty. All too often high school students have the same experience. Procedures that lead to this result will, in my opinion, greatly limit the over-all effectiveness of education and will tend to intensify the undesirable submergence of individuals in mass organization in our society generally.

The extension of mass techniques of teaching by the use of television and increase in class size, both of which limit the personal relations of teachers and

pupils, in my opinion, should be appraised against this broader setting. Many people view teaching as a matter of getting across so much knowledge and certain skills and are willing to let the evaluation of education rest largely on testing of achievement in these areas. To me teaching is far more than this and its most important outcomes cannot possibly be realized when the personal element is minimized or eliminated. The challenges to be met in the future make this even more essential than it has been in the past.

Requirements for education other than the ones I have selected might well seem of greater importance to other educators. I would readily agree that there are many additional points that merit consideration. On this alone I would insist: As science and industry remake our world with incredible speed, education must also proceed with vigor and vision to new levels of effectiveness if civilization is to be preserved and advanced. We must not think small in relation to education. Just as the scientist and engineer project ever bigger and more revolutionary developments, so educational leaders must move forward with broad-scale plans and programs to meet the more complex, extensive, critical, and pressing needs of the decades ahead for effective education.

Barriers to Academic Communication*

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PERHAPS it is no accident that of two eminent spokesmen for religion in higher education, the earlier, Cardinal Newman, should discuss "The *Idea* of the University," while the later, Sir Walter Moberly, should speak of "The *Crisis* in the University." Why did not the nineteenth century *Idea* become a twentieth century *Reality* instead of a *Crisis*? What are the nature and cause of the crisis in higher learning today?

In idea or ideal a university consists of a group of scholars working in a variety of fields yet forming an organic unity. Moreover, this unity is of a very particular kind. It is not merely that of a common administrative structure, name, geographic location, and tradition. These are superficial and incidental in comparison with the vital unity afforded by the means of effective communication between members of the university. Nor does this communication have to do primarily with social and practical matters, but with the most absorbing and profound intellectual concerns of the various departments of scholarly endeavor. The organic character of the university presupposes a basis for mutual understanding among the different fields of inquiry.

The crisis in the university is a result of the breakdown of communication.

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Frequently those who practice one discipline cannot make themselves understood by members of other specialties. The inner unity is replaced by one that is purely external and organizational. Administrative power must accordingly be exercised not only to manage the practical affairs of the institution and to present a unified front to society but also to coordinate and conciliate the isolated and estranged specialists. The university in name and form has become a multiversity in fact. The crisis in the university is a crisis in communication.

Hence it is important to discover what are the barriers to effective communication within the academic community and to consider the measures which must be taken to overcome them. It is the purpose of this article to suggest certain approaches to the solution of the problem of communication in general and within the academic society in particular.*

THE SPECIAL RELEVANCE OF SCIENCE

In discussing academic communication the scientific disciplines have special relevance. Though much of what is to be

* The problem of the fragmentation of knowledge and the search for academic integrity, with which the present paper deals from the standpoint of communication, has been widely and fruitfully discussed in recent times. See, for example, Frederic Lilge's *The Abuse of Learning*, Ortega y Gasset's *Mission of the University*, and Robert Hutchins' *The Higher Learning in America*.

said below will be concerned with this aspect of the problem, a preliminary statement may be useful at this point.

The sciences are especially significant because, though they are based upon the ideal of effectiveness of communication, they are also a major source of barriers to communication. The rise of modern science is founded on the discovery of ways of resolving reliably and to the satisfaction of all inquirers questions about the processes of nature. By scientific methods knowledge becomes no longer subject to such endless and inconclusive debate as has regularly characterized philosophical and theological matters. Science promises assurance and certainty, not in the sense of completeness and finality, but in that of communicability and confirmability. Knowledge in science is *common*, in that anyone who will may test an alleged fact to see whether or not it is really true. The results of scientific inquiry are held to be public and objective, in contrast with the private and subjective character of unscientific discourse. Hence the central objective of the scientific enterprise may be considered as the removal of barriers to communication by the construction of clear and precise systems of language and definite testing procedures.

In the fulfillment of this objective the sciences have proved brilliantly successful. Disagreements and confusions have been overcome, permitting the orderly and progressive advancement of the many fields of scientific inquiry. Unhindered by lingering conflicts regarding matters already established, each scientific community has been free to devote its full and united energies to attacking one by one the unresolved problems on the frontiers of knowledge.

Yet curiously enough this very concern for communicability and this very success in establishing scientific commu-

nities have been a major source of communication barriers in the modern world. While there may be agreement and understanding among the members of each discipline, the members of different disciplines have often tended to become more and more isolated from one another and from the layman. The specialized communicability of scientific knowledge has been bought at a price which has seldom been adequately recognized and assessed. Knowledge in science rests upon certain definite conditions which impose a correspondingly limited character upon what is known.

The several sciences thus provide excellent material for understanding how barriers to communication are created and how they may be removed. Such understanding, however, rests also upon a general inquiry into the process of communication and into the major characteristics of knowledge in its various fields, both within and beyond the realms specifically designated as scientific.

WHAT IS COMMUNICATION?

It is the fashion nowadays to answer the question, What is communication? * by reference to the new developments in communications engineering. One should not underestimate the importance of these modern technical wonders. They may contribute signally not only to the quality, range, and efficiency of communication but also to a better understanding of the theoretical problems in this field, including questions about barriers. Nevertheless, it seems doubtful that these technical advances really touch the core of what communication is, any more than

* This analysis is concerned with *human* communication rather than with communication in general, which was the subject of an earlier article, "A Philosophic View of Communication," *Teachers College Record*, Vol. 57, No. 2, November 1955, pp. 80-85.

developments in electroencephalography really tell us about what thought is.

Communication in essence is the recognized re-creation of meaning. It is the production in the receiver of significant form identical with that in the sender, and recognized as such. Because communication in the full and proper sense is thus concerned with conscious identity of meaning it belongs to the realm of the personal. This is why the engineering approach is not concerned with communication *as such* but only with its context and conditions. Properly speaking, communication occurs only between persons, whose uniqueness is defined by the power of self-transcendence. It is only through the capacity to be at one and the same time oneself and imaginatively another person that awareness of identity is possible. The sender's communicative intention consists in the will to create identity of significance in the receiver, and the latter's receptivity is based upon a corresponding concern for unity of meaning.

COMMUNICATION TECHNOLOGY

The personal nature of communication may perhaps become clearer through a general analysis of what communication technology involves. The elaborate schemes of telegraphy, telephony, radio, and television serve simply one purpose—to overcome the barriers of physical separation. Instruments of communication exist to annihilate distance. How do they accomplish this? They do so by means of a variety of energy exchanges. In the telegraph the kinetic energy of the sender's finger is replaced by electrical impulses which in turn are exchanged for energy of motion of the armature on the receiving instrument, and finally for the sound energy of the clicks heard by the recipient. In television, light and sound energies are exchanged for electromagnetic oscil-

lations, and these are reconverted into light and sound by the receiving instrument. Change in kind of energy makes possible the conquest of distance because some types, such as radio waves, will carry much farther and are much less subject to interference by intervening obstacles than other types, such as light and sound.

The energy changes that take place in communication are of a very special sort. They are designed to preserve the form of the signal. Such energy changes are said to be *isomorphic*. The essence of communication technology thus consists in the production of isomorphic energy transformations, the intermediate types of energy being selected so as to minimize the influences of space and matter barriers. In addition to selecting appropriate intermediate types of energy for purposes of efficient transmission, most devices of communication utilize amplifiers. These are simply isomorphic energy multipliers, arranged so that while the form of energy output is the same as that of the energy input, the amount is increased.

To sum up, the range and effectiveness of communication may be increased by the use of instruments because (1) there are different types of energy, some less influenced by space and material barriers than others, (2) one type of energy may be exchanged for another, or (3) the amount of energy may be increased by amplifying devices, and (4) the foregoing exchanges and amplifications may be arranged in such a way as to maintain approximate identity of form throughout.

Now what has this to do with the personal nature of communication? First, it needs to be observed that instrument-making is a distinctively human function. The other animals do not make or use tools. Only man deliberately and consciously transforms nature for his own

purposes. The tools which he makes depend upon the power of concept-formation. An instrument is designed for a certain kind of function, and this means the formation of an idea of a class of particular uses. Secondly, the instruments of communication are based on the idea of identity—of isomorphism—and this is a distinctively personal idea. Recognized identity of significant form is evidence of self-transcendence. In simpler terms, the construction of any instrument presupposes rationality, and one of the important marks of rationality is abstraction, or the formation of class concepts which permit the discerning of identities and differences between entities.

The elaborate instruments of communication in the modern age do not of themselves create communication. They only extend and sustain it. Their existence bears witness to the prior reality of communication as a personal transaction.

CAN MACHINES COMMUNICATE?

At the risk of belaboring this fundamental point let us consider the problem of constructing a robot. In principle, could a robot be constructed which would be capable of human communication? There seems to be a close analogy between the mechanism of human perception and the isomorphic energy exchanges within a television system. The eye corresponds to the camera, the nervous mechanism to the electrical circuits, and the mental image to the picture on the screen of the receiver. But does this similarity of mechanism really equate perception itself with a process of isomorphic energy transformations? No, the essence of conscious perception lies not in the channels through which the energy input is delivered but in the distinctively mental fact of awareness. We have no clue as to how to translate the images on the robot's

picture tube into the awareness of intelligible relatedness with an "out-there" which is the heart of perception.

Perhaps the robot could be improved and humanized by giving it memory. For example, the energy patterns picked up by the camera eyes could be preserved on tapes which could be brought into play, reproducing the original images, upon reception of certain key signals. These key signals would correspond to the words and other symbols in most human communication. These are characterized by the fact that they do not contain in themselves the form of what is to be communicated, but only serve to stimulate the remembering of the appropriate content. Because of memory, communication can take place more economically by means of signals than by depending on complete transmission of significant form, such as occurs in original perception.

The robot could be equipped with a memory mechanism, but would it really remember, any more than it really perceives? No, the memory mechanism simply means that the form of past events is conserved so as to be relevant in the later operation of the machine. True memory is knowing the past *as past*, and not merely acting in the present in ways which reflect the influence of what an observer with true memory knows as the past. The analysis of memory mechanisms may be important in considering certain barriers to human communication, but it should be recognized that the physiology and neurology of communication as it depends on memory do not go to the very heart of communication but are concerned only with its effective conditions.

TECHNICAL AND PERSONAL BARRIERS

The foregoing discussion of the robot was included primarily to dramatize the

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difference between the *means* of communication and communication itself and to prepare the way for the observation that barriers to communication are of two kinds, technical and personal. Most contemporary analyses of communication are concerned largely with the technical rather than the personal aspects. Actually the latter are by far the more decisive. It is for this reason that a religious perspective on communication and its barriers, based as it is on personal concern, should provide better insights than a purely technical analysis.

The breakdown in communication in the modern university is not simply the result of increasing specialization in the several areas of knowledge. It is more fundamentally a result of personal estrangement. The excessive compartmentalization of knowledge is not only a source of barriers but also a symptom of prior personal barriers. The mutual incomprehensibility of the special disciplines is not simply a consequence of the logic of inquiry but is the basic form of human sin, the wages of which is the death of personality and hence the destruction of true communication. The tragic nature of the drive to become autonomous lies in the fact that what is intended to secure and strengthen the self is in fact the very means of its undoing.

The scientist or scholar who seeks absolute self-sufficiency works to create an impregnable theoretical fortress. To the extent that others join him in his stronghold and help him to defend it against all assaults he is not literally isolated. But such an association is not actually person-sustaining, since it is dedicated to independence and estrangement rather than to community. Much of what is paraded as disinterested research is in reality an expression of the autonomous spirit, motivated by inordinate ego demands.

Personal barriers to communication are not independent of the technical ones. What appear to be technical matters of linguistic usage or criteria of meaning may in fact be further evidence of personal estrangement. Technical complexities become the excuse for aloofness and the expression of personal isolation. Hence it is fruitless to attempt to solve the problems of communication solely or chiefly on the technical level. Communication engineering and symbolic logic, valuable as they may be as tools, cannot of themselves remove the barriers to communication. The source of the difficulties lies in the depths of the human heart, and only as men are transformed through contrition and love will they be able to find and use the means appropriate to understanding one another. The restoration of the university to its true integrity thus depends upon the recovery of the personal sources of community. This is precisely the central problem of religion—the emancipation of man from self-centered isolation. Hence the problem of barriers to communication is in essence a religious one whose solution consists in the spiritual regeneration of man taken captive by the forces of impersonality.

After this preliminary discussion of the general nature of communication and its barriers, let us look at the more specific problems in establishing communication, chiefly with reference to the academic disciplines.

PHYSICAL OBSTACLES

In the earlier history of mankind, physical obstacles were a major barrier to communication. Facilities for clear, full, and speedy transmission of messages were extremely limited. Modern technique has virtually eliminated these obstacles. Important as this contribution is, it should be emphasized that the spectacular engi-

neering developments have not solved the most essential problems in communication. Though the physical barriers are the most obvious ones, they are by no means the only or even the most crucial ones. In some respects, perhaps, the clearing of channels for communication has even accentuated the real crisis.

LANGUAGE DIFFERENCES

Another barrier to communication is differences of language. While this may be a significant practical factor for the traveler, the diplomat, or the businessman engaged in international commerce, it does not interfere to any considerable degree with mutual understanding among academic people. Major works in each of the principal fields of knowledge are available in translation for those languages in which extensive scholarly endeavor is carried on, and whatever is not already translated can be made accessible by modest effort and expense. Thus the barriers of language difference are of minor importance and are easily surmounted.

CULTURAL DIVERSITY

Differences in culture constitute another barrier to communication. Discourse in almost every field of knowledge presupposes an entire cultural background. In philosophy, for example, pragmatism reflects the practical and optimistic temper of America in the early twentieth century, existentialism is in part a mirror of cultural crisis on the Continent of Europe, and the British analytic movement is doubtless related to the traditional English concern for and pride in language. As a consequence of basic cultural differences, the thought of scholars in the Soviet Union, in Muslim lands, and in the Far East manifests many divergences from that of scholars in America or in Western Europe. This would be the case

especially with respect to the study of history, psychology, and the social sciences and somewhat less in the natural sciences. Communication does not occur in isolated and independent words and sentences. It necessarily takes place within a whole cultural context.

These differences are of some contemporary importance in the university because of the considerable number of international exchanges of students and teachers. Every influence which increases mutual understanding across cultural lines helps to open channels for effective communication within the university, while all movements such as militant and exclusive nationalism which estrange those of different cultures from one another tend to increase the fragmentation of the academic world.

EMOTIONAL BARRIERS

Communication occurs not only against the background of a cultural complex but also out of an emotional matrix. Communication is not merely rational. Some things cannot be understood because they cannot be emotionally accepted. Non-rational factors act as guardians and censors of the rational processes. In the academic world the research specialist tends to identify himself with certain methods and theories. In these he finds personal security and a framework of meaning. In order to retain his self-confidence he cannot admit any fundamental challenge to his ideas. Those who seek to communicate disturbing ideas to him find him curiously and obstinately impenetrable and perverse. What seems to them to be clear and obvious evidence is regarded by the one who already knows the truth as utterly erroneous.

Emotional attachment may create barriers between persons in the same field of study, or it may serve to isolate one dis-

cipline from another. Those who are professionally identified with a field of study often cling to it, cherish it, and defend it strongly simply because their own emotional life is deeply involved with it. Such champions of a specialty are frequently unable to understand what members of other fields say or do, especially if any challenge is offered to their own safety and autonomy. Furthermore, lacking true concern for the ways and concepts of others, they are generally unable or unwilling to make their own ideas clear to members of other disciplines.

It is commonly asserted that scientific methods provide a way of eliminating emotional obstacles to communication. It is true that careful operational definition of meanings does greatly reduce the danger of arbitrary personal bias. Hence emotional factors in the failure of communication may be of greater significance in the humanistic fields than in the exact sciences. Yet it also needs to be recognized that the sciences themselves rest upon human decisions and conventions, and that these emotion-eliminating devices can themselves become invested with profound emotional significance. Thus, there are scientists who are unable to understand ways of thinking other than the ones used in their own field, simply because their personal commitment to their special procedures is so complete. There are, of course, nonscientists who for the same reason cannot comprehend science. However, the point being made now is that scientific methods do not provide any sure solution for the problem of emotional barriers to communication between the academic disciplines.

The removal of emotional obstacles is perhaps in some degree the task of psychotherapy. Some attachments are based upon neurotic anxieties which may yield to such treatment. Fundamentally, how-

ever, the problem is religious, stemming from unrelieved concern for personal justification and life meaning. Only when these constricting anxieties are overcome by the power of a transforming faith and by a vivid sense of participation in a common cause is the person free to emerge from the academic fortress he and his associates have built and to engage in the creation of true community.

AMBIGUITY OF LANGUAGE

Communication is sometimes hindered by the ambiguity of language, that is, by the use of words having more than one meaning. The way to make meanings clear in this event is by reference to the context. Word meanings are not definable in isolation from use. Each linguistic constellation imparts a somewhat different significance to a word. Ambiguity frequently occurs because of differences between technical and common-sense usage of terms or between usages in different technical fields. For example, words like "energy" or "time," as defined in physics, may have connotations quite different from the same words when employed in everyday language or in other scholarly fields, such as philosophy or theology.

Apart from the patient examination of context, the only way to escape ambiguity is to use different words for different meanings. The proliferation of technical vocabularies, chiefly in the special sciences, is largely a consequence of this attempt to overcome ambiguity. Unfortunately, this invention of new terms at the same time tends to isolate each specialty from the others and technical language from the domain of common meanings. However, even the purest technical terms soon become drawn into the muddy stream of everyday discourse and there take on new ambiguities. Consider, for example, the way in which the new lan-

guage of psychology—particularly psychoanalysis—has been taken over, and used and misused, by the lay public. And so we return to the only permanent technical solution of this problem—the persistent scrutiny of context.

LACK OF RELEVANT EXPERIENCE

Failure to communicate may be due simply to lack of relevant experience on the part of the one to whom the message is directed. The power of language to convey meaning depends upon the possession of a sufficient body of appropriate common experience. Words mean nothing to one who has not participated in the events with which they are by convention associated. The range and variety of possible human experiences are very large. The modern experimental attitude has encouraged the exploration of still more possibilities. Yet full actualizing of experience potentials requires sustained effort, and individuals are limited in what they can expend. No person today can be expected to undergo the long and arduous discipline required to understand profoundly more than a few fields of knowledge, let alone all of them. Becoming a first-rate research physicist, for example, generally precludes at the same time becoming a master painter or a ranking expert on international law. From among the virtually infinite possibilities, finite man must choose finite paths.

Since full communication is possible only in relation to common experience, it follows that finiteness and the necessity of choice within a boundless manifold of possibilities limit communication. But these limitations are not necessarily barriers. They become so only when differences in experience are the occasion for personal estrangement. For example, a mathematician may be unable to com-

municate the meaning of certain difficult concepts to a historian because the latter's fund of cognitive experience does not correspond to the former's. Yet this historian may catch some new glimpse of the mathematician's world, as a result of the effort to communicate, and may thus through faith kindled by imagination share in that other world. Furthermore, in this faith the historian knows that his experience must be made perfect through the experience of others, such as the mathematician, with whom he is linked in scholarly affection, trust, and respect in the academic community. On the other hand, if the mathematician were to use his special knowledge as proof of his exclusive superiority to the historian, the latter's lack of mathematical experience would constitute a barrier to communication rather than an opportunity for widening horizons and discovering the communion of the academic saints.

SYSTEMATIC CHARACTER OF KNOWLEDGE

Closely akin to both the problem of ambiguity and the lack of relevant experience is the difficulty occasioned by the systematic character of knowledge. A specialist in a highly developed field of knowledge cannot explain his subject concept by concept to the uninitiated, since each concept is defined in terms of other concepts within the field. This is especially true in the sciences, which are distinguished by their systematic and cumulative character. Each element in the theoretical structure rests upon and presupposes an entire hierarchy of prior elements. Therefore, one can understand the subject only by starting with the foundations and moving step by step through the entire system. Communication is thus possible only between professionals who have undergone the same discipline and

not between the professional and the layman.

Understanding by the layman may be facilitated by the use of certain key concepts which serve as epitomes of entire idea systems.* Skillful explanation of these concepts may afford a general grasp of the essential outlook and methods of a whole technical field which would otherwise be quite unintelligible. Such representative ideas are possible only because the knowledge is systematic. Hence the connectedness of cumulative knowledge schemes can be used to facilitate rather than to limit effective understanding between persons in different disciplines.

DIFFERENCES IN LOGIC OF DISCOURSE

Communication across disciplines frequently fails because of differences in the logic of discourse. This is particularly the case between the sciences and the humanistic studies. The language of the former is exact and literal in intention, while for the latter the modes of expression are frequently metaphorical and symbolic. Reading poetry in the same spirit as one might read geology or chemistry will certainly result in utter misunderstanding. Conversely, the metaphorical interpretation of writings in the exact sciences is equally unwarranted.

Unfortunately the logic of the respective fields of knowledge has not in every case been sufficiently explored to render the distinctions entirely clear. In some fields there is considerable confusion as to what logic does apply. History is an example. Precisely what is the nature of historical knowledge? In one sense it is literal and factual like knowledge in the natural sciences. On the other hand, un-

* For further discussion of this suggestion see the author's "Key Concepts and the Crisis in Learning," *Teachers College Record*, Vol. 58, No. 3, December 1956, pp. 137-43.

like science, it is concerned with unique events rather than with generalizations and with the past rather than with prediction. Another example is the field of ethics. Moral convictions play an important part in human affairs, and people debate about right and wrong as if these matters were subject to reasoned judgments. Like scientific propositions, moral statements are generalizations, and they can be validated in future outcomes. Yet they do not have the same factual character as scientific statements.

Theology is another field in which the logic of discourse has not been widely and clearly understood. Theological affirmations often have the same form as the factual propositions of science, and the claim is made that they are important and true. At the same time, they are said to be articles of faith not derived from or accessible to the same kind of inquiry as the facts of science. Obviously, then, natural science has a different logic of discourse from that of theology. Nor is this difference precisely the same as in the case of poetry, history, or morality.

These differences in the logic of discourse do not in themselves constitute barriers to communication. They become barriers when the exclusive validity of one logic is affirmed. Thus, one who champions the literal, factual logic of natural science may regard artistic expressions as devoid of truth and as mere feeling, moral judgments as prejudices, and religious beliefs as superstitions. He may respect historical knowledge, but only if it is purely scientific and without any element of evaluation and interpretation. On the other side, an ardent humanist may regard the scientific enterprise with disdain, as destroying genuine insight and appreciation of things in their concrete integrity.

The restoration of true community in

the academic world requires the recognition and mutual acceptance of the varieties of possible discourse and the sincere effort of those in one discipline to appreciate the different logic of workers in other fields. Much further study is needed to make clear the nature of knowledge in the various fields in order that the several ways of using language may be understood. In this lies the great importance of philosophic analysis in the service of communication. Hitherto the analytic movement has itself often been too narrow, too partisan, and too destructive of knowledge claims which its practitioners personally did not understand or approve. There are now signs of a broader, more sympathetic, and more constructive approach to analysis which may provide important means of overcoming barriers to communication.

DIFFERENT CRITERIA OF MEANING

The logic of discourse is defined by certain criteria of meaning. Communication can occur only among persons who employ the same standards of meaning for the transmitted signals. It is because of their meaningfulness that the signals serve not merely as vehicles for transmission but as significant symbols. Careful definition of meanings has been an important objective in the scientific enterprise. This has been based on detailed, orderly statements of the exact procedures to be employed in verifying propositions. The development of relativity physics is an excellent example of a theoretical advance based squarely upon a determined and thoroughgoing effort to specify verification procedures and thus to define the real meaning of propositions about space, time, and motion. Insofar as criteria of meaning have been stated, there is no bar to understanding by anyone who is will-

ing to undertake the discipline of carrying out the required tests. In practice this is usually a formidable undertaking. In its place, an imaginative grasp of how the testing might be carried out generally suffices for fruitful communication between members of different disciplines.

Outside of the exact sciences there has not been the same success in setting up precise operational definitions of meaning. In the field of history, for example, how is one to determine the truth about past events? The meaning of historical statements cannot be specified, as in most natural sciences, by the repetition of an experiment. Historical construction is based on a complex process of inference from present evidence of unique past events, within the framework of certain principles of selection and interpretation. Criteria of meaning in morals and esthetics are equally difficult and different from those of natural science. The social sciences and psychology are perhaps the most confusing of all, because they aim at the exactness of natural science operational definitions but are confronted with problems such as freedom and value which seem to require important modifications of criteria in the direction of those appropriate to the humanistic disciplines.

For effective communication between members of different disciplines, careful analysis and exposition of criteria of meaning must be provided for each field of inquiry, especially outside of the exact sciences. There must also be a willingness to consider a variety of types of criteria. In particular, the natural scientist should not demand that his sense data verification procedures be the sole admissible standard of meaning. At the same time, he has the right to ask that historians, theologians, literary critics, and psychologists examine their own criteria of mean-

ing and provide explicit directions as to how one may test what they affirm.

VARIETIES OF ABSTRACTIONS

One of the ways in which the sciences have succeeded in establishing effective communication is through the process of abstraction. Instead of attempting to describe objects and events in their concrete wholeness, certain aspects are selected for analysis. Thus, the physical sciences are concerned with the behavior of material systems with respect to a series of carefully specified kinds of measurement operations. It is doubtful whether the psychologist or even the biologist can satisfactorily analyze his materials in just the same way that the physical scientist does. Each field of inquiry is concerned with a different set of abstractions. Each abstraction system emphasizes certain kinds of characteristics and yields a special type of perspective. One mode of abstraction is not necessarily better than the other; each serves certain distinctive purposes.

Abstraction is designed to facilitate inquiry and communication by establishing principles of simplification. Since entities cannot be understood completely in their wholeness, special features are designated for scrutiny. Abstraction becomes a barrier to communication with those in other fields when one mode of analysis is set up as the supreme or the only admissible one, or when the abstraction is mistaken for the full concrete reality. The latter error is what Whitehead named "the fallacy of misplaced concreteness." The outstanding success of the physical sciences in prediction and control has led many to regard the metrical abstractions in those fields as the best or as the only valid ones, or even to consider that they yield the whole truth about the world, so that all other alleged

knowledge (for example, historical, ethical, religious, esthetic) is inferior, underdeveloped, and ultimately reducible to the one true kind.

Removal of barriers requires a due awareness of the partial character of the knowledge supplied by each field and a recognition that each perspective needs to be supplemented and enriched by others. Abstractive exclusiveness and autonomy are usually symptoms of personal estrangement, anxiety and defensiveness, and openness to other modes of abstraction waits upon the healing of the soul, in which the genuine desire for participation in community is restored.

It should also be noted that disciplines differ not only in the kinds of abstraction employed but also in the degrees of abstraction. Mathematics and logic are purely abstract, while the arts are fundamentally concrete. Biology, concerned as it is with organisms, is more concrete than physics, and clinical psychology is less abstract than experimental psychology. History, too, is a relatively concrete field of study. These differences in approach must be understood and welcomed if full communication within the academic community is to be assured.

TYPES OF INTERSUBJECTIVITY

It was pointed out earlier that the sciences represent a systematic effort to open the channels of communication by standardizing the procedures of inquiry, thus replacing individual personal preference by public consensus. This goal has usually been designated scientific objectivity. The term "objectivity" is, however, likely to be misleading because it can be interpreted to mean that the personal or subjective element should be wholly eliminated from knowledge. In reality, since knowledge is a relation between the knowing subject and the

known object, there can be no purely objective knowledge. Scientific objectivity actually involves a controlled intersubjectivity, that is, a precise public specification of the manner of relating subject to object in the process of cognition. This amounts to setting up a constitution for a community of discourse. Each field of inquiry is thus built around a fellowship of persons who have pledged their obedience to a well-defined discipline of intersubjective communication.

The facility of communication afforded by these communities of discourse is more often than not offset by a decline in understanding of other disciplines. This results from the illusion that pure objectivity (and hence full "reality" or "truth") has been achieved in one's own field and from the failure to recognize the validity of other modes of establishing controlled intersubjectivities. Reconciliation within the estranged academic community demands a vivid realization of the place of the subject in knowledge and communication and an appreciation for the variety of possible ways of constituting reliable communities of discourse. It is also requisite for the practitioners of every discipline to take as careful thought as the scientists have for the definition of criteria of meaning in their fields of inquiry and thus to define with sufficient clarity the conditions which must be fulfilled by any who sincerely seek understanding of the field. This does not at all mean that every discipline must be based upon the procedures of the exact sciences, but simply that there must be the same determined self-consciousness about the foundations of intelligible discourse in religion, history, the arts, philosophy, and psychology as in mathematics and physics.

Such clarity of definition may be a condition for the success of the much-

discussed program of general education, the goal of which can be taken as that of making the different communities of discourse as widely accessible as possible. Such education will not consist of surveys which yield only superficial knowledge of the fields studied, but will provide an initiation into their authentic methods and mysteries. By thus affording real membership in more than one specialized community of inquiry, general education may help to recover the lost unity of the university.

PERSONAL COMPETENCE

The inevitability of the subjective and intersubjective factors in all knowledge suggests a concluding observation concerning barriers to communication. One person can communicate to another person only meanings which the latter is personally competent to experience. There are some people who, because of education or native characteristics, are not able to meet the conditions for certain kinds of cognitive experience. For example, mathematics may be barely accessible to persons with meager powers of abstraction. Esthetic or ethical knowledge may not be meaningful to persons with indiscriminating sensibilities or moral blindness. Religious knowledge may make no sense to those who lack the gift of self-surrendering faith. The privilege of participating in any community of meaningful discourse belongs only to those who are able to meet the personal conditions by which significant ideas are defined within that community. No realm of meaning, scientific or otherwise, is simply free and public in the sense that nothing is demanded of those who would enter. Every authentic field of knowledge is a discipline in that each who comes in must willingly submit to the rules of the order. Not everyone has the requisite

personal qualifications to do so. True knowledge is that which can be verified by all who will submit to the discipline by which its meaning is defined. For the natural sciences the qualifications are a certain abstractive ability and unimpaired sense perception. Other fields of knowledge such as history, religion, and the social sciences require for full understanding other capacities such as empathy, sensitivity to values, appreciation of purposes, and personal dedication.

The city of truth has many mansions. It is no mere collection of public places where all and sundry may wander at will. Each dwelling is inhabited by those who

by birth and by nurture have gained the right and the character to live there. It is a friendly city, too, where neighbors visit one another, each appreciating and respecting the rule of life of others whose habitations he is privileged to enter.

In sum, communication is a personal transaction and the creation of true communities is one with the formation of complete men. The real barriers to communication are not technical, but personal. The restoration of the academic community—of the university—is one with the redemptive inner transformation of academic man.

What Education Has to Learn from Psychology*

V. Learning Is Reacting

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It seems to be generally agreed among psychologists today that one learns what, and only what, one does. That is, one learns the acts that are performed, the words that are repeated, or the thoughts and feelings that are experienced. Some readers may consider this so altogether self-evident that it is not worth further discussion. Unfortunately, much educational practice is based on entirely different principles and it is important to become aware of the extent to which current practice diverges from the simple principle stated in the title of this article.

That one learns the reactions one makes is to be contrasted with the point of view that learning is a process of taking in, absorbing, imbibing, more or less passively. One accumulates knowledge, gathers facts, absorbs a point of view. The language is full of expressions that show that learning is similar to eating: a person hungers and thirsts for knowledge, he devours his books, he takes in new ideas. Curiosity which characterizes the true

learner leads to an acquisitive type of learning. Those who hold this point of view place emphasis on memorization, which means that one makes the words of another person one's own and is able to repeat them.

Let us look at some of the background of these two points of view. The issue as to what constitutes learning finds its earliest expression in Plato and Aristotle. Plato is the forefather of the point of view that learning is the equivalent of scholarship. In the Dialogue called *Euthydemus* he tells us, "Learning is used first in the sense of acquiring knowledge of some matter of which you previously have no knowledge."¹ And in the *Meno*, "Knowledge only is the guide of right action."² So the Platonic point of view is that learning is the acquisition of knowledge which may then be used by a person to guide his actions and behavior.

But Aristotle has a different point of view. In the *Nicomachean Ethics* he says,

The things which we are to do when we have learnt them, we learn by doing them; we become, for instance, good builders by building and good lyre-players by playing the lyre. In the same way it is by doing just

* This is the fifth in a series of articles by Professor Symonds on this subject. The first (Motivation) appeared in the February 1955 *Teachers College Record*; the second (Reward) in the October 1955 issue; the third (Punishment) in April 1956; and the fourth (Whole versus Part Learning) in March 1957.

¹ Plato, *Euthydemus*, 278.

² Plato, *Meno*, 97.

acts that we become just, by doing temperate acts that we become temperate, and by doing brave deeds that we become brave. . . . It is by habituation that lawgivers make citizens good, and this is the aim of every lawgiver.

It is by playing the lyre that both good and bad lyre-players are produced, and it is the same with builders and the rest. It is by building well that they will become good builders, and by building badly that they will become bad builders. If it were otherwise, we shall have no need of anyone to teach us; we would become good or bad as the case might be. So too in the case of goodness. It is by acting in business transactions between man and man that we become just or unjust as the case may be, and it is by acting in the moment of danger and habituating ourselves to fear or not to fear that we become cowards or brave men. So too it is with our desires and feelings of anger. Some people become moral and good-tempered, according as they behave themselves in one way or another in these matters. . . . It is of no little importance, then, that we should be habituated this way or that from the earliest youth; it is of great importance, or rather all-important.³

William James was perhaps the first to enunciate the Aristotelian point of view clearly in our times and in his admirable style. I quote from his *Talks to Teachers*.

"Man's supreme glory," the philosophers have said, "is to be a *rational* being, to know absolute and eternal truth." The uses of his intellect for practical affairs are therefore subordinate matters. "The theoretic life" is his soul's genuine concern. . . . In the psychology of our own day the emphasis is transferred from the mind's purely rational function, where Plato and Aristotle,* and what one may call the whole classic tradition in philosophy had placed it, to the long neglected practical side. . . . Man, whatever else he may be, is primarily a practical being, whose mind is given him to aid in adapting him to this world's life. . . . You [as teachers] should regard your professional task as

if it consisted chiefly and essentially in *training the pupil to behavior*; taking behavior, not in the narrow sense of his manners, but in the very widest possible sense, as including every possible sort of fit reaction on the circumstances into which he may find himself brought by the vicissitudes of life. . . . Education cannot be better described than by calling it the organization of acquired habits of conduct and tendencies to behavior.⁴

James's statement represents a transition from a point of view that has been held since the days of Plato, but today we are so accustomed to the position James expresses—that learning is reacting—that we find it difficult or even impossible to transplant ourselves into the climate of the older standpoint. Every person inherits several layers of cultural concepts that are passed on from one generation to another. Even though an individual may subscribe to the current psychologically accepted view that learning is reacting, he will probably still harbor traces of older beliefs. Do not some of us still tend to think of school as a place where one learns what one is taught, or college as where one absorbs the wisdom of his professors? Do we not still think of education as a body of subject matter to be acquired? The newer point of view was not substituted for the older because of experiment, but in consequence of the impact on thinking of the great biological discoveries of the nineteenth century by Darwin, Huxley, and others. They taught us the meaning of adjustment—that man like the other animals has a need to adjust to his environment as a condition for survival. So the emphasis in education and psychology has shifted from contemplation to reaction.

Guthrie, a behaviorist, has stated, "We learn only what we do . . . we learn to

³ Aristotle. *Nicomachean Ethics*. II:1.

* James was in error in attributing this point of view to Aristotle.

⁴ William James, *Talks to Teachers on Psychology* (New York, Henry Holt and Company, 1899, 1939), pp. 22, 23, 25, 28, 29.

repeat our specific movements and emotional responses under circumstances which have previously accompanied them."⁵

Dewey, now known as a philosopher, was very much a psychologist in his early years, and his psychological point of view influenced his philosophy throughout his career. As early as 1896 Dewey argued that one should not place exclusive emphasis on incoming afferent impulses—impressions received from outer stimuli; or on outgoing efferent responses. Rather he should recognize the importance of the complete reaction process of response to stimulation.⁶

Later Kilpatrick applied this point of view to education.

True to an older psychology the school has sought to save time and secure certainty of learning results by presenting youth with the formulated finished results of others' thinking. For this the textbook has in our country been the main reliance. A century ago verbal memorization was the rule.⁷

He then elaborates on what he considers to be the modern and correct point of view concerning learning.

How then does learning take place? First, what we would learn we must practice. We learn the responses we make. Precise exercise is necessary.⁸

Kilpatrick came out still more strongly in his most recent statement,

We learn our responses, only our responses,

⁵ E. L. Guthrie, "Conditioning: A Theory of Learning in Terms of Stimulus, Response and Association," Chapter 1 in *The Psychology of Learning*, Forty-first Yearbook of the National Society for the Study of Education, Part II (Bloomington, Illinois, Public School Publishing Company, 1942), p. 58.

⁶ John Dewey, "The Reflex Arc Concept in Psychology," *Psychological Review*, 3: 357-70, 1896.

⁷ W. H. Kilpatrick, *Education for a Changing Civilization* (New York, The Macmillan Company, 1926), p. 95. ⁸ *Ibid.*, p. 97.

and all our responses; we learn each as we accept it to live by, and we learn it in the degree that we accept it.⁹

Since this point of view has dominated psychology and education for a half century or more, it is difficult to believe that psychologists could ever have held an opposing point of view. But Alexander Bain, professor of logic at the University of Aberdeen, wrote in 1878 as follows:

For the success of the schoolmaster's work, the first and central fact is the plastic property of the mind itself. On this depends the acquisition not simply of knowledge but of everything that can be called acquisition. The most patent display of the property consists in memory for knowledge imparted. In this view the leading inquiry in the act of Education is how to strengthen memory. . . . Although memory, acquisition, retentiveness, depends mainly upon an unique property of the intellect, which accordingly demands to be scrutinized with the utmost care, there are various other properties, intellectual and emotional, that aid in the general result, and to each of these regard must be had in a science of Education.¹⁰

And again,

"The retentive faculty is the faculty that most of all concerns us in the work of Education. On it exists the possibility of mental growth."¹¹

It was said earlier that the current belief of psychologists that learning is essentially the reinforcement of response is based largely on logical considerations concerning the stimulus-response nature of behavior. Experimental evidence to corroborate this belief is not extensive. One thinks first of all of a little-publicized study by Carpenter and Fort in which they found that the relationship

⁹ W. H. Kilpatrick, *Philosophy of Education* (New York, The Macmillan Company, 1951), p. 244.

¹⁰ Alexander Bain, *Education as a Science* (New York, D. Appleton and Company, 1878, 1887), pp. 7, 8. ¹¹ *Ibid.*, p. 20.

between results on achievement tests and pupil activity—that is, number of times a pupil volunteered in class and the number of questions he answered—is represented by substantial to high correlations of .50 to .86. Even when IQ was held constant, the partial correlations between achievement and pupil activity were from .43 to .84. That is, the most responsive pupils learned the most.¹² One can argue, of course, that these correlations do not necessarily indicate cause and effect, but they do indicate that possibility.

Probably the most convincing evidence is to be found in the experiments on recitation. While not the first of the studies of the influence of recitation (that is, repeating material to oneself without the benefit of text) on learning, Gates's doctoral dissertation, is by far the most thoroughgoing and convincing.¹³ At the time that Gates did his study, the educational world had not shaken off its preoccupation with memory, so it was natural that he should have studied the influence of recitation on memorizing. From carefully planned and executed experiments he was able to demonstrate that recitation reduces the time for learning, increases retentiveness, results in more prompt recall, actually shows greater superiority in delayed than in immediate recall and greater advantage in nonsense than in meaningful material. Recitation, as contrasted with passive reading leads to greater certainty of knowledge, fewer blunders, and knowledge that is better organized in more usable form. The meaning is better retained and the relation between parts is

clearer when recitation is the method of study.

Later, Forlano demonstrated that what Gates proved in a laboratory situation is also true in the actual school situation.¹⁴ Forlano points out that recitation provides more opportunity for confirmation or reinforcement, which is so necessary in learning.

Gates asserted that pure reading would probably not lead to memorization at all. That is, learning takes place only as the person actually repeats or says to himself what he reads. Learning is an active process and not a matter of mere absorption.

As a result of these experiments it was suggested that, while admittedly it is necessary to read at the beginning of learning, as soon as one has had the initial impression it is better to use the available time in recitation than in additional reading. But recitation undertaken too early leads to error. On the other hand, if the passage is long, obviously more time must be devoted to reading and less to recall. The time to introduce active recitation depends on such factors as the length of the passage, its difficulty, the kind of learning expected, the maturity and capacity of the learner, and his previous learning habits.

The upshot of this is that education has experimented with many active procedures which will ensure learning. The student is advised to take *notes* as he reads or listens to a lecture. It is suggested that he *outline* the material; that he *summarize* it; that he condense it in a *precis*; that he *review* his notes. The use of *questions* will stimulate an active, searching process as one reads. Groups stimulate activity in

¹² W. W. Carpenter, and M. K. Fort, "What Effect Do Visitors Have on Recitations?" *Journal of Educational Research*, 22: 50:53, 1930.

¹³ A. I. Gates, "Recitation as a Factor in Memorizing," *Archives of Psychology*, Volume 6, No. 40, 1917.

¹⁴ George Forlano, *School Learning with Various Methods of Practice and Reward*, Contributions to Education, No. 688 (New York, Bureau of Publications, Teachers College, Columbia University, 1936).

the form of discussion and the preparation of group reports. Generally the oral forms of active participation, as in discussion, are more productive than those that are laborious and time consuming, such as writing summaries and outlines.

What has been said about reading applies equally to listening. I sometimes tell my class, facetiously, that so far as I know I am the only one who is learning when I lecture because I am the only one doing anything. It is true that some members of the class are moving pencil over paper, but I cannot tell how many are cerebrating. Some instructors become annoyed when a student interrupts with a question or a comment. I rejoice when a student asks a question because it is sure evidence that he has responded to what I have said, particularly if he disagrees with me. Although the use of class time for discussion is becoming increasingly popular there are many, both instructors and students, who believe it is wasteful. I frequently hear it said, "I paid my money to learn from the instructor and not to have to listen to the uninformed rantings of my classmates." If students oftentimes stray from the point in discussion or express various prejudices or present misinformation, at least these are the responses of members of the class and indicate what they have learned and are learning. It is the instructor's task, by skillful questions that reveal inconsistencies, failure to make discriminations, and lack of knowledge, to spur students on to seek further knowledge and to clarify their thinking.

Another innovation in modern education is the introduction of laboratory methods or so-called "research." Students are presented with problems and furnished with materials by which they can reach a solution. This has been standard practice in the sciences for many years.

Somewhat more recently, pupils in the social studies have been encouraged to use library sources or even to gather firsthand information in community, home, or school by which they can answer the questions with which they have been challenged. Reading is then done with a purpose, and learning becomes an active process par excellence.

What has been discussed about the relative effectiveness of passive reading and active responding for learning applies equally to other avenues of information. In particular, it points to a danger in connection with the use of television in education. There will be a temptation to seat students before a television screen for an hour and to assume that learning takes place. Experimenters should remember the necessity of a pre-viewing period in which the instructor and the students discuss what they are about to see on television, what they wish to watch for especially, and what questions they will want to talk about as a result of what they are to see. It is essential that a period following television be provided for discussion of what was seen. And those who are to lecture and demonstrate on television must learn ways in which they can stimulate the viewers to activity while the television broadcast is in progress.

It is fitting at this point in the discussion to reverse the thesis of this paper, "Learning Is Reacting," and look at it from a different angle. *One learns only the reactions one makes.* Practice is not always in accord with this principle, particularly with reference to the relation between language and behavior. There seems to be an implicit assumption in much of today's education that if one learns the words, one has learned, *ipso facto*, to put the words into practice, and that behavior immediately follows upon the words.

Many years ago I visited an eighth-grade algebra class which was working on factoring. A day earlier, the pupils had been assigned a textbook page devoted to the square of a binomial. When I entered the classroom the teacher was calling on one pupil after another to stand and repeat the following, "The square of the sum of two numbers is equal to the square of the first number plus twice the product of the first and second number plus the square of the second number." The square of the difference of two numbers was also called for and the answer expected was to be identical with the former except for the substitution of one word, minus for plus. Most of the period was spent in going from pupil to pupil around the class. At the close of this exercise some children could repeat the rule without error and others could not, but there was not one child in the class who could square the sum or difference of two terms or factor such square. The class had learned only the words.

More recently I visited another class, an English class taught by a woman who in many respects was an excellent teacher. But a large part of the period was spent in repeating an alphabetical list of prepositions—aboard, about, above, across, after, against, and so on. Pupils strove to satisfy the teacher by reciting the list accurately from beginning to end. It was in the textbook and therefore was to be memorized. No reference was made at any time to the use of prepositions and, so far as I could see, the learning of this list had no influence on the speech or writing of these pupils. I have wondered what use they would make of this learning. I could imagine that years later they would burst out with "aboard, about, above," apropos of nothing, just as my father used to puzzle me by reciting *amo, amas, amat*.

This reminds one of the famous Quincy, Massachusetts, movement. In 1873 a committee of the school board of Quincy conducted an examination of its schools. According to the report the school went to pieces.

The pupils could parse and construe sentences and point out the various parts of speech with great facility, repeating the rules of grammar applicable in each case, yet were utterly unable to put this theoretical knowledge to any practical use, as they showed when called upon to write an ordinary English letter. . . . they could stand up and spell rapidly and correctly but they could not spell correctly, nor anywhere near correctly, in the letters they wrote—and this after eight years of careful training!¹⁵

As a result of these revelations, Colonel Francis W. Parker was called to be the superintendent of schools in Quincy in 1875 to institute reforms in the methods of teaching which came to be known as the Quincy movement.

The absurdity of the assumptions made in connection with these practices will be easily accepted by most educators today. We can generalize by saying that one does not learn to speak, write, or think correctly in a language by learning its grammar; one must practice that language to use it correctly. One does not become proficient in mathematical processes by learning their rules. One does not learn to be a musician by studying harmony and counterpoint; one must compose or perform music. One cannot learn to play golf or tennis out of a book; one must practice on the links or court.

The question may well be asked then, Why study grammar or harmony or ethics? Rules and principles were codified by an analysis of acceptable language or music or conduct and can be used by

¹⁵ Francis Wayland Parker: *His Life and Educational Reform Work* (New York, E. L. Kellogg and Company, 1900), p. 18.

any individual who wishes a guide in making a decision as to the proper construction in language, or music, or conduct. But grammar or harmony serves for reference only—as a guide to learning—but learning to speak and write effectively takes place only through practice. A prospective teacher might well study grammar to aid her in what she teaches. But the teacher who would teach children to speak and write effectively and correctly would not teach them grammar and rhetoric as such, but rather would give them practice and experience in speaking and writing, always guiding and directing them into more effective usage. So the prospective teacher who wishes to guide conduct and help to form character might well take a course in ethics. But she would not teach ethics to her pupils; rather she would guide them into desirable ways of behaving by sympathetically approving desirable conduct and frowning upon undesirable conduct. She would do this not in theory and in the abstract, but with reference to the actual practice of behavior itself.

In short, the education of a teacher may well follow the Platonic pattern. A teacher should be a master of the rules, principles, and theories of that which he expects to teach. He must have studied grammar and rhetoric, harmony and counterpoint, and ethics so that he will know right from wrong; but in teaching his pupils he must be an Aristotelian, putting his emphasis on arranging opportunities for pupils to practice and experience under guidance. Even a teacher, if he would perfect himself in the use of a foreign language, would do better to follow the Berlitz method of listening and speaking than to concentrate on the study of grammar.

There are other instances of the use of language in relation to learning which

are not nearly so obvious. It is common practice today to believe that one teaches by talking, and that the talking should be sufficient for learning. It is assumed that a child learns good behavior by being told what is right and wrong. When the child learns his catechism or when the professional man reads the code of ethics it is assumed that the verbal reaction is sufficient to ensure the proper behavior. Teachers frequently say, "I told him not to do it," as though that should be sufficient to determine the learning of the behavior.

Underlying this practice is the belief that behavior and conduct are under volitional control and that to "teach" a child what is right is sufficient to determine right behavior. The assumption here is that what one does he does by an act of will—that he determines and controls what he does, and that he can change his behavior by self-direction.

What is the psychological evidence for this? Evidence as such is strangely lacking. Indeed, what evidence there is indicates that knowing what is right is unrelated to doing what is right. Corey, for instance, asked college students to express their attitude toward cheating on tests and found that overwhelmingly they disapproved of cheating as sinful and unworthy. But when given an opportunity to cheat in a situation where students graded their own papers after they had been secretly graded and recorded, three-quarters of the class cheated by changing their answers. There was no relation (coefficient of correlation of .02) between what they said about cheating and their actual conduct.¹⁶

Two generations ago psychologists rather widely held the view that behavior

¹⁶ S. M. Corey, "Professed Attitudes and Actual Behavior," *Journal of Educational Psychology*, 28: 271-80, 1937.

was largely subject to volitional control. A classic statement of this point of view was made by James.

We may then lay it down for certain that every representation of a movement awakens in some degree the actual movement which is its object; and awakens it in a maximum degree whenever it is not kept from so doing by an antagonistic representation present simultaneously to the mind.¹⁷

James's illustration of this is of a man getting out of bed,

The idea flashes across me "Hollo! I must be here no longer"—an idea which at that lucky instant awakens no contradictory or paralyzing suggestions, and consequently produces immediately its appropriate motor effects.¹⁸

But as Thorndike points out, the idea in this illustration is not a representation or image of the movement of leg, trunk and arms at all, but a series of words. Thorndike attacked this doctrine vigorously in his presidential address to the American Psychological Association in 1912 in a paper entitled "Ideo-Motor Action."¹⁹ He says, "Nine out of ten psychologists believe in one or another form of the doctrine that an idea tends to produce the act which it represents or resembles or is 'an idea of' or 'has as its object'."

Thorndike's point of view was that "the idea of a movement, or of any other response whatsoever, is, in and of itself, utterly impotent to produce it." His argument is that if an idea is sufficient to produce action it is because it has been learned to do so. Some persons have never learned to govern their conduct by their thoughts. Those who have

learned to do so must first have responded to the words of another person. A child responds to the words of his mother either because by so doing he avoids punishment or because he receives some reward, such as his mother's smile and approbation. Then later, as he repeats to himself the same words in the form of a direction or a command, he responds to his own inner words or thoughts, but this is a learned connection and one cannot assume that it has been made in every child.

A contemporary analysis of the same phenomenon has been made by Dollard and Miller using the term "cue-producing response."²⁰ By this somewhat cryptic expression these authors mean that some responses—such as uttering a word or thinking a thought—may serve as the cue to another response, such as performing an act. That is, if a person sees the sign DANGER—EXPLOSIVES—KEEP OUT, he will say to himself, "This is a dangerous place, I must get away," and suit his action to the words. These authors, too, produce no experimental evidence but merely say,

Our hypothesis is that all the laws that have been discovered for our learned responses to external cues also apply to internal response-produced cues.²¹

In short, words do not have native or unlearned power to produce action. To be able to guide conduct by our thoughts, we must first have made the response, performed the act, exhibited the behavior, and then this behavior must in some way be tied to the thought before the thought can evoke the response.

I wish now to point out three instances in contemporary life where there is unfounded assumption that learning lan-

¹⁷ William James, *The Principles of Psychology*, Volume II (New York, Henry Holt and Company, 1890), p. 526.

¹⁸ William James, *op. cit.*, p. 524.

¹⁹ E. L. Thorndike, "Ideo-Motor Action," *Psychological Review*, 20: 91-106, 1913.

²⁰ John Dollard and N. E. Miller, *Personality and Psychotherapy* (New York, McGraw-Hill Book Company, 1950), pp. 98ff.

²¹ *Ibid.*, p. 100.

guage is the equivalent of learning behavior: (1) in personality evaluation, (2) in "preaching," and (3) in psychoanalysis and psychotherapy.

There is widespread belief today that personality evaluation somehow influences subsequent performance. Pupils are given report cards with the tacit expectation that the evaluations of conduct recorded there will in some way affect future conduct. There is a vigorous movement afoot to subject workers to "merit rating." The purpose of merit rating is, in part, to establish a basis for promotion, salaries, and so forth, but merit ratings are also given as a supervisory device. It is hoped that an "evaluation" presented to a teacher or a nurse will influence her to improve her performance. There is an assumption in the "report card" or in "merit rating" that a person will be enabled by the evaluation of his performance to correct his errors and to increase his effectiveness.

There is an assumption that behavior is an act of will, but there is no justification for this assumption. Personality and behavior have been learned through the selection of responses that are rewarding and bring success to the individual. The only way to change personality and behavior can be through practicing new responses under tutelage and guidance that will reward the preferred behavior. Merely to receive information about one's performance will not accomplish this. Although "report cards" and "merit ratings" may have motivating power, the assumption that they will contribute to improved performance must be ruled out. Changes and improvement can be brought about only by practice of the actual skills and other learning to be improved.

This statement that evaluations, report cards, and merit ratings have little in-

fluence on changing behavior, in a sense goes contrary to much experimental evidence that information or knowledge of results leads to increased learning. Most of these experiments have been carried out in laboratory situations based on test results when the results were reported soon after the learning exercises. Book and Norvell²² tested the influence of knowledge of results on speed and accuracy in making the small letter *a*, in crossing letters in a list of Spanish words, in substituting code symbols, and in two-place multiplication; Elwell²³ on shooting arrows at a target; Ross²⁴ on making tallies quickly and accurately; Panlasigui and Knight²⁵ and also Brown²⁶ on drill in arithmetic; Sims²⁷ on code substitution and improving reading speed; O'Brien²⁸ on silent reading; and Angell²⁹ on chemistry. In all of these studies knowledge of results was followed by learning which exceeded the learning of control groups that did not have this knowledge.

These facts must be interpreted in terms of reinforcement discussed in the

²² W. F. Book and Lee Norvell, "The Will to Learn," *Pedagogical Seminary*, 29: 305-62, 1927.

²³ J. L. Elwell, "The Effect of Knowledge of Results on Learning and Performance," *British Journal of Psychology*, 29: 39-54, 1938.

²⁴ C. C. Ross, "The Influence upon Achievement of a Knowledge of Progress," *Journal of Educational Psychology*, 24: 609-19, 1933.

²⁵ I. Panlasigui and F. B. Knight, "The Effect of Awareness of Success or Failure," *Twenty-ninth Yearbook, Part II, National Society for the Study of Education*, 1930, pp. 611-21.

²⁶ Francis Brown, "Knowledge of Results as an Incentive in Schoolroom Practice," *Journal of Educational Psychology*, 23: 532-52, 1932.

²⁷ V. M. Sims, "The Relative Influence of Two Types of Motivation on Improvement," *Journal of Educational Psychology*, 19: 480-84, 1928.

²⁸ J. A. O'Brien, *Silent Reading* (New York, The Macmillan Company, 1921).

²⁹ G. W. Angell, "Effect of Immediate Knowledge of Quiz Results on Final Examination Scores in Freshman Chemistry," *Journal of Educational Research*, 42: 391-94, 1949.

article on "Reward" in this series.³⁰ It is generally agreed that reinforcement is more effective the closer the reward or reinforcement is, in time, to the response which is to be learned. The most effective reinforcement is one that follows the response in a matter of seconds. If the response is delayed by hours, days, or even weeks (as is the case of the report card or merit rating), then its effect is reduced to the vanishing point. Also reinforcement is more effective if the response to be learned is simple, clear-cut, and not imbedded in a mass of concomitant responses. The types of material in the various experiments mentioned meet this criterion. But if the learning is more complex, and if the evaluation is in terms of character traits and personality variables and particularly if it is reported days or weeks after the behavior has been observed, then it is doubtful that an individual will be able to translate the symbols of the report into changed behavior. Perhaps that is why Deputy found that knowledge of weekly test results did not seem to influence results in the final examinations in philosophy.³¹

Religious "preaching" is a second instance in contemporary life where it is assumed that learning language is sufficient for changing behavior. Preaching has been part of the tradition in both the Hebrew and the Christian religion for many centuries, starting with the activities of the prophets. One main purpose of preaching is to pass on religious beliefs and doctrines, but currently one of its functions is to uphold the moral ideals that the religions have stood for. The extent to which preaching gets trans-

ferred into conduct has seldom been questioned. George Coe is one of the few who have questioned accepted practices. In his book *What Is Christian Education?* he says,

There are still great areas of church activity and relationship in which we judge our efficiency chiefly by guesses. This is true, for example, of preaching and worship, upon which enormous labor and funds are expended.³²

There is an assumption that by going to church and, in particular, listening to the sermon, people are made "good." One periodically hears the recommendation that the delinquent be encouraged to go to church as a way of combating delinquency. There is no question but that the church has great influence in upholding the moral ideals of the community, but there is no evidence that preaching helps to translate these ideals into behavior.

In a study of delinquency made some years ago it was found that delinquents have as much moral and more religious knowledge than nondelinquents.³³

A third instance of the assumption that words become translated into action is in psychoanalysis and psychotherapy. With the increasing prestige of psychotherapy there is a belief that as a result of undergoing psychotherapy a person is enabled to change his character and behavior. According to the theory presented in this discussion, since a person in psychotherapy spends his time talking, the changes that can most surely be expected to take place are verbal. In short, as a result of psychotherapy a client may change in his thinking, his concepts, his attitudes, and

³⁰ P. M. Symonds, "What Education Has to Learn from Psychology, II. Reward," *Teachers College Record*, 57: 15-25, 1955.

³¹ E. C. Deputy, "Knowledge of Success as a Motivating Influence in College Work," *Journal of Educational Research*, 20: 327-34, 1929.

³² George A. Coe, *What Is Christian Education?* (New York, Charles Scribner's Sons, 1929), p. 143.

³³ E. L. Bartlett and D. B. Harris, "Personality Factors in Delinquency," *School and Society*, 43: 653-56, 1936.

particularly in his concept of and his attitudes toward himself, since that is what he is likely to talk most about.

Indeed, psychotherapy differs from the two previous illustrations because in psychotherapy the individual is encouraged to respond (verbally). Freud introduced the method of "free-association," which means that the subject permits himself to talk aimlessly without censorship. As a matter of fact, psychoanalysis is often ridiculed because the analyst says so little himself and lets, even encourages, his client to do all the talking. Rogers stressed the same point in what he originally called the "nondirective approach."³⁴ Here he was countering the older technique in counseling, in which the counselor did most of the thinking and talking, with the procedure that he recommended of giving the subject freedom to express himself without direction or control.

A study of psychotherapeutic case reports indicates that change and growth take place principally through abreaction (responses that the client is encouraged to make) rather than through interpretation (which are the responses of the therapist).³⁵

But it cannot be assumed that changes in verbal expression—new ideas, concepts, attitudes, and ideals—will automatically result in changes in behavior. Changes in behavior and personality will take place following psychotherapy only as the individual is enabled to practice new ways of behaving. It should be added here that changes in one's self-concept may indirectly influence behavior and in this way psychotherapy may indirectly influence personality and behavior. One

should not forget Dewey's stress on the complete reflex arc. Although the emphasis in the present discussion has been on the necessity of the response in learning, one should not forget that responses are responses to something—the stimuli to which one is sensitive. Now an important group of these stimuli are internal—in short, to use Dollard and Miller's term—"cue-producing responses." That is we do respond to the cues of our own inner thoughts, attitudes, feelings, and evaluations of ourselves. The person who has a low valuation of himself with respect to any area of human endeavor becomes inhibited—he does not try, and thus there is no possibility of learning. But the individual who has a high valuation of himself responds eagerly and freely and hence places himself in a favorable position for learning.

Lecky demonstrated this principle in psychotherapy with high-school and college students as reported in his book *Self-Consistency: A Theory of Personality*, a book that won for him posthumous fame.

If the pupil shows resistance toward a certain type of material, this means that from his point of view it would be inconsistent for him to learn it. If we are able to change the self-conceptions which underlie this viewpoint, however, his attitude toward the material will change accordingly. With the resistance eliminated he learns so rapidly that tutoring is often unnecessary.³⁶

Applying this principle, Lecky was able to change poor spellers into good spellers. This was done not by any magic, but by removing the resistance to learning spelling. Pupils thus were enabled to practice and hence to learn.

This agrees with conclusions reached by Rogers and Dymond in their research

³⁴ C. R. Rogers, *Counseling and Psychotherapy* (Boston, Houghton Mifflin, 1942).

³⁵ P. M. Symonds, *The Dynamics of Psychotherapy: The Psychology of Personality Change*, Volume II (New York, Grune and Stratton, 1957).

³⁶ Prescott Lecky, *Self-Consistency: A Theory of Personality* (New York, Island Press, 1945), p. 120.

on the changes that take place following psychotherapy.

The change in self-perception appears to be a central element in the process of client-centered therapy. The emergence into awareness of new perception of the self is characteristic of our cases, particularly of those rated as successful.³⁷

Rogers adds,

The over-all conclusion appears justified that, where client-centered therapy is judged to have been successful, an observable change in the direction of maturity of behavior takes place in the client. . . . not only do certain inner conceptual changes occur, and certain subtle changes in personality, but the way the client makes choices, drives a car, behaves in group discussion, treats other people, acts when interrupted, etc., changes in ways that are evident both to himself and to his friends.³⁸

But such changes do not take place automatically. After the therapeutic sessions a client must have the opportunity to practice new ways of behaving if the changes in personality and behavior are to take place. But at any rate psychotherapy helps to remove the road blocks to such change.

A brief summary statement may help to clarify some of the foregoing points. Many persons are confused as to how changes in personality and behavior take place. The traditional educational method

is to "tell the child" what to do, with the expectation that learning the words will be translated into behavior. This will take place only with those children who have learned to follow directions and to "do as they are told." Unfortunately this procedure works least well with those children whom we would want to influence most.

The only way a delinquent can be helped to learn new and approved behavior patterns is by being placed in an environment where he will have an opportunity to practice new and different behavior. This means that the people around him are using social behavior with satisfaction, that he is shown in detail what kinds of behavior are expected of him, and that he will derive satisfaction from a new and different kind of behavior. And if there is a neurotic component to the delinquency, then in addition he needs to be helped to form a different concept of himself—as a person who is not delinquent and outcast, but is accepted and self-respecting. It is only through the opportunity to practice new ways of behaving that change in personality can be effected.

Psychotherapy produces changes in a client not because of what the therapist says or does, but because of what the client is encouraged to say, think, and experience with feeling.

Education produces learning not essentially by what a teacher says, thinks, or does, but by what a pupil can be encouraged to say, think, do, and feel.

³⁷ C. R. Rogers and R. F. Dymond, *Psychotherapy and Personality Change* (Chicago, The University of Chicago Press, 1954), p. 425.

³⁸ *Ibid.*, p. 237.

Reflections on the White House Conference*

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IT is early, perhaps, to attempt to evaluate the White House Conference on Education. It was a big event, long in the planning and widespread in the execution, and it set in motion chains of events which have not yet run their course. But the problems of education continue serious, and it is obvious that the means brought to bear upon those problems are not yet sufficiently bold or powerful to overcome them, so it may be well to look back and try to assess the value of holding such a conference, the good it did, the questions it answered, and the questions it left unanswered. Such an assessment depends on relating what the conference did to what it was supposed to do, and the missions left unaccomplished must provide some measure of adequacy or inadequacy.

When the White House Conference on Education was first announced, sweeping language was used to state its objectives—so sweeping as to suggest the intention to bring about a fundamental rethinking of all that had been done in education. President Eisenhower said that it would be “the most thorough, wide-

spread, and concerted study the American people have ever made of their educational problems.” In his 1954 budget message he said, “The proposed national conference and preparatory state conferences will be the most important steps toward obtaining effective nationwide recognition of these problems and recommending the best solutions and remedies.”

Those statements suggest that the Conference was intended to do two things: obtain effective nationwide recognition of these problems, and recommend the best solutions. A candid review will reveal that of the two objectives, the former received the principal attention of the planners of the conference, that is, it was thought out and operated in terms of getting newspaper and public relations attention to problems of education, and from this point of view it was an undoubted success. As a result of the White House Conference there *was* more attention given by the organs of opinion to problems of education than in any comparable period.

But in considering the other objective—recommending the best solutions and remedies—no such sweeping statement can accurately be made, for the fact is that the Conference ignored some of the most pressing problems facing education, and even for those it treated, it failed in

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certain cases to recommend solutions. This is not to say that the Conference failed to provide some solutions, for some of the pressing questions were faced and resolutely answered. Before analyzing the questions which the Conference left unanswered, it may be well to look briefly at those which were answered.

AMERICANS WANT GOOD EDUCATION

First, the White House Conference demonstrated in dramatic fashion that responsible Americans want good education for their children, and they want it available on a scale hardly achieved anywhere. The Conference Report is eloquent in its appreciation of the contribution education makes to the welfare of the individual. Note this language:

As long as good schools are available, a man is not frozen at any level of our economy, nor is his son. Schools free men to rise to the level of their natural abilities. Hope for personal advancement and the advancement of one's children is, of course, one of the great wellsprings of human energy. The schools, more than any other agency, supply this hope in America today. By providing a channel for ambition, they have taken the place of the frontier, and in a highly technical era, have preserved the independent spirit of a pioneer nation. The schools stand as the chief expression of the American tradition of fair play for everyone, and a fresh start for each generation.

Let us remember that the White House Conference had an opportunity to say that the American people want cheap education—return to the three R's, back to McGuffey, let's have just the bare minimum, no fads and frills, cut out all the professional nonsense. But this group of citizens who had spent some time thinking about education—its importance and its problems—said the exact opposite. They summarized their view in the following words:

The basic responsibility of the schools is the development of the skills of the mind, but the over-all mission has been enlarged. Schools are now asked to help each child to become as good and as capable in every way as native endowment permits. The schools are asked to help children to acquire any skill or characteristic which a majority of the community deems worth while. The order given by the American people to the schools is grand in its simplicity: in addition to intellectual achievement, foster morality, happiness, and any useful ability. The talent of each child is to be sought out and developed to the fullest. Each weakness is to be studied and, so far as possible, corrected. This is truly a majestic ideal, and an astonishingly new one. Schools of that kind have never been provided for more than a small fraction of mankind.

And then they concluded with this magnificent sentence:

It is primarily the schools which allow no man's failure to prevent the success of his son.

The White House Conference did not, of course, speak for the American people; it was, however, a representative gathering of a large number of responsible citizens who had put their minds to these problems. And these people demonstrated, dramatically and quite clearly, that they would have no part of the idea that the schools should return to the limited objectives espoused by some of their critics.

EDUCATIONAL CRISIS IS RECOGNIZED

The second question answered by the White House Conference pertained to the public attention to be paid to the crisis in education. If you ask if there is a crisis in education, the White House Conference gives a stirring and clear answer: Yes there is a crisis; it is a deep and serious one, and it affects the vitals of our society. The sense that something must be done, and done soon, pervades the Report.

The new importance of education has been dangerously underestimated for a long time.

* * *

Ignorance is a far greater handicap to an individual than it was a generation ago, and an uneducated populace is a greater handicap to a nation.

* * *

It is the belief of this Committee, however, that improvement (in schools) has been nowhere near fast enough. The onrush of science has outstripped the schools. What is even more important, ideals of human conduct have in some areas advanced as rapidly as technology. Many a school which seemed good enough a generation ago now seems a disgrace to the community where it stands.

* * *

It is an ironic truth that most Americans would not permit their children to live in a house which is as bad as the school buildings which many pupils are forced by law to attend.

Yes, there is a crisis, and these people saw it clearly.

AMERICANS RESPECT THE PROFESSION OF EDUCATION

The third question which the Conference clearly answered—and this may prove in many respects to be the most important of its contributions—is in the area of the recognition by laymen of the role of professionals in education.

The question of the confidence laymen have in educational professionals is more important than most laymen realize, but professionals have been deeply conscious of it. Most responsible professionals have felt that many laymen distrusted them. Belittling school men has been quite fashionable, and not just along the lunatic fringe. Attacks on modern education make headlines. The defense is hidden in the back pages.

Many professional educators have re-

flected, and reflected bitterly, on the way that the medical profession deals with quacks. Law suits are instituted and action is quick. But it sometimes seems as if equivalent behavior in the profession of education—far from being punished—is rewarded by public accolade, lead stories in major magazines, favorable positions on best-seller lists, and high return from royalties.

But the assault on the schools has come not only from the irresponsible, but also from responsible agencies in many cases distressed by school performance. This has led responsible and thinking professionals in education to a deep sense of pessimism about the capacity of their own profession to make its values understood and to get general public recognition of the fact that there are such things as professional questions in education on which the knowledge of a professional should be controlling in exactly the same sense that it is in medicine.

No layman—at least no wise layman—will try to tell the doctor what the diagnosis is. The ability to diagnose is assumed to be a part of the doctor's professional knowledge. In education, however, it sometimes seems that many laymen wish to provide the diagnosis and pressure the schools into adopting their own form of therapy. There seems to be a host of people who are eager to rescue the schools from domination by the professionals.

It is a curious fact that following the White House Conference on Education, the charge was even made—publicly and loudly and widely—that the Conference had been stacked by the professionals. This was the ultimate ludicrous note, for the truth had been that the professionals, fed doubtless by their worry and concern about lay reaction, had been fearful that the Conference would be stacked *against* them. And their ground for this suspicion

was the very decision of the managers of the Conference to have at least two laymen present for each professional, and that proportion had been respected in the selection of personnel for the Conference. I confess that I had serious misgivings in facing the prospect of the discussions in the Conference, for I expected to be criticized for the very thing which I might bring to such a conference—professional knowledge to buttress its deliberations.

But as the Conference actually unfolded, we found ourselves faced with great and solidly based lay confidence in professionals and in their knowledge. This was deeply heartening to me personally, and I believe to the other professionals who were there. And it was quite striking in its manifestations. Partisans may, if they wish, say that the Conference was stacked by the professionals. The truth is that as the questions became difficult to deal with and the contentions developed, the individual delegates turned to the professionals for help.

When it was recognized by all that the question of finance was the most important and the most contentious, I—a professional—was asked to act as chairman. I demurred on the ground that I thought a professional ought not to serve in this capacity for the most controversial item of the Conference. But my colleagues decided, by unanimous action, that I was to lead the discussions on this question and to represent them at the next level. At that level, where those who had served as chairmen of "table" discussions gathered, the group again chose me, over my own opposition, to represent them at the next higher level, where all of the tables of the Conference were represented by only sixteen persons. There, I found myself in a group of eight, six of whom were recognized professionals in the field of education. Of the other two, one was a senator

who had served sixteen years as chairman of the education committee in his state Senate, and the other was a newspaper man as skilled and experienced in reporting on education as any I have met.

It was easy to see what had happened. The laymen—persons concerned with problems of education, faced with controversy, with questions where technical knowledge played a part—had turned to the professionals and given a dramatic demonstration of their confidence. They obviously believed that there is such a thing as technical knowledge in education and they made it clear that they respected those who had that knowledge.

Because the White House Conference on Education answered such questions, its results have been and will be beneficial in many important ways. The Conference was not stacked for or against anyone or anything, as some had feared. It did provide a dignified and serious forum for worthy discussion of great issues. So it was surely a good thing to hold such a conference. But still the fact remains that the White House Conference left much unsaid that needs to be said. There are many unanswered questions.

VITAL QUESTIONS WERE LEFT UNANSWERED

It would be impossible for any conference to consider all the problems facing education. Choices had to be made, and some issues were omitted by design—some of surpassing importance, such as desegregation, higher education, and the relations of public and private education. Many critics have contended that these omissions compromise the value of the Conference. Whether or not they should have been discussed is debatable, but there should be little disagreement with the point of view that the Conference ought to have given thorough considera-

tion to the issues which were mandated by the mission assigned by the President. Of these issues, three seem to be basic: (1) How can we finance our schools? (2) What should be the role of the federal government in education? (3) What are the roles of the professional and the layman in education, and how should the two be related? These questions were indigenous to the Conference. The first was actually a main focus of the discussions. The other two were posed by the circumstances in which the Conference was held. In view of the President's statement that the Conference was intended to "recommend the best solutions," the failure to give reasonable and realistic treatment to these issues cannot be lightly ignored.

The discussion which follows treats these issues in the order given.

How Can We Finance Our Schools?

The White House Conference Report is clear and eloquent in expressing the determination that we shall have good education and have it everywhere available. It recognizes that such education will be costly. "This great lifting of the sights [of education] implies greatly increased expenditures for schools." In fact, in what the Conference Report itself calls its "fundamental" recommendations, we find the following words:

In view of the recommendations of this committee concerning the objectives of education, teachers, and buildings, it seems obvious that within the next decade the dollars spent on education in this nation should be approximately doubled.

How the hearts of educators must have leapt when they read this, for here was recognition of the ultimate problem stated in fairly bold terms. But how disappointed educators must have been when they read

the rest of the Report. For when the time came to figure out where the money was coming from, far from being realistic or, as the President had asked, "recommending the best solutions and remedies," the Conference Report recommended no solutions or remedies at all.

It is true that the Conference itself did recommend federal aid in the area of school construction, and the Conference Committee echoed this report, although one senses reluctance on the part of certain members of the Committee, some of whom expressed themselves on this point. But when it came to facing up to the big question, here is what they said:

The Committee is presenting no recommendation concerning federal aid for school operation. Reports from state conferences and reports from the participants in the White House Conference on Education indicate great division of opinion on this subject. The reports also indicate that there is much greater public interest in federal aid for school building construction than in aid for school operation.

This conclusion cannot be squared with the facts given by the Committee for the White House Conference in its own Report. It is true that there is greater public awareness of the school building crisis than of the other great problems ahead. But, after all, the big school expense is school operation, not school construction. Surely the mission assigned to the Conference Committee involved looking into so immediate a problem as this. What they did, though, was state a number of fine objectives for American education, then set forth in tabular form facts which prove that these objectives cannot possibly be attained without long-term continuing federal aid for education, and then ignore the sure conclusion inherent in their own data.

The Report stresses the determination

that our present inequalities of educational opportunity will be eliminated, and many facts are supplied to show that the poorest states cannot possibly be expected to finance the improvements needed. The Committee Report states:

The evidence is clear that a few states are so lacking in economic ability that they cannot finance an adequate system of public education without a tax effort which would be so excessive that it might retard economic development.

The Committee did not go on to say that this inequality could be corrected only by federal action, but that is the only possible conclusion. How else could the objective be achieved? By charity? As the tables of data show, if Arkansas taxed its citizens for schools three times as heavily as Connecticut does, it would still not have enough funds to bring its schools up to even the national average level of expenditure. There is no hope that the poorest states could make the needed improvements utilizing their own resources alone.

If the Committee had responsibly faced the task laid on it by the President—namely, to recommend the best solutions—it would have recommended federal aid for school operation in the poorest states. But this is not all that the Committee left dangling in the problem of finance. The Report deals with much more than achieving equality of opportunity. It deals also, and very fully, with what must be done to improve the quality of education everywhere, not only in poor states but in the rich ones as well. It was to improve the quality of education that the Committee recommended that school expenditures be approximately doubled within the next decade; that is, they should rise from \$9 billion to \$18 billion per year.

That states the aspiration. What is the prospect that our actual performance will measure up to the aspiration without federal aid to education? Again the data supplied in the very Report of the Committee prove that there is no hope of achieving the objective unless the federal government gives substantial support. Just think what it means to double educational expenditures. It means that the localities which in 1954 raised \$4.5 billion would have to raise \$9 billion, and practically all local revenue comes from the tax on property. In most American communities a proposal to double the property tax would not even be taken seriously. And at the state level the situation would be even worse, for in 1954 the states raised some \$3.2 billion for education. The rest of the funds the schools obtained came from borrowing, which future revenues will have to repay. If the states are to raise their educational expenditures to the level indicated by the Committee they will have to treble them. In view of the competition among the states to keep taxes low, of the political realities under which they operate, and of the competition from other activities for the states' dollars—especially competition from other federal programs which promise federal aid if the state will undertake them—in view of all these disadvantages, there is no reasonable prospect that the states will achieve levels of expenditure for schools anywhere near those recommended.

The conclusion is therefore justified, in terms of the information which the White House Conference developed and laid before its own participants and had available in making its own Report, that the objectives set forth could not be achieved without large-scale continuing federal aid. This must therefore be chalked up, not only as the first and most

important of the unanswered questions in the Report of the White House Conference but as a major failure to fulfill the responsibilities assigned in the President's mission.

What Should Be the Role of the Federal Government in Education?

The second mandated question deals with the problem of federal policy for education. This problem would not appear important to a person who believes that there should be no federal policy. But in view of the present level of activity of the federal government in education and of its inevitable rise in response to the desires of the American people for improved education, this view seems no longer tenable. It seems particularly odd that we should have had a national conference, utilizing the symbol of the White House, of national government and national policy, and should have come out of it with no statement concerning the role of the federal government.

In some places the Report skirts the issue; it comes close and retreats without making a major decision. It is my belief that the Report would have had more value if it had contained a forthright recognition of the following federal responsibilities:

1. The federal government's interest in the quality and quantity of education.
2. The necessity for the federal government to serve as a guardian of American education—to protect it from harm.
3. The obligation of the federal government to equalize educational opportunity, for it is the only agency capable of bearing the differential of expense among the rich and the poor states.
4. The responsibility of the federal government to share the financial burden of education. This should not be a

grudging or temporary thing; the cost of the educational enterprise should be borne by the three levels of government in a mutual partnership.

5. The federal educational responsibility, recognized by practically all, to aid, to stimulate, to report, and to do research.

Surely there would be far less controversy over this question of federal policy for education if there were a clear understanding of the federal government's interest in the problem, and for that reason the failure of the White House Conference Committee to look into it is especially regrettable.

The time has long since passed when we can look with indifference at the rejection in the draft of up to 50 per cent of the young men of seven states on grounds of physical and mental inability to serve their country.

The White House Conference Committee says that good schools are expensive but nowhere near as expensive in the long run as poor ones. How I wish that they had looked into the cost of the poor ones, for plenty of data can be found! It costs far more to correct the damage done by the ignorant than it does to educate them.

Take all the social dislocations you can think of, the festering sores of our social organism. Take the costs of economic dislocations, such as unemployment, old-age relief, and public assistance. Take the costs of dealing with health problems, disease, sanitation, and mental illness. Take the costs of the great social dislocations, crime and delinquency, and the institutions that deal with them, prisons, courts, correction and parole. Add all these costs together. They are the price of dealing with social ills. I call them the correctional costs. One-half of all these costs in our cities are occasioned by only 6 per cent of the families. Practically all Ameri-

can families can take care of themselves; just one family in sixteen costs as much, from the correctional point of view, as all the rest.

These are the educational derelicts of the United States, and the taxpayers of wealthy states might well ponder the meaning of these terms. Maybe they can reduce expenditures on education, but they cannot prevent educational derelicts from burdening their correctional budgets.

We live in a technical age, in an industrial age, and in a changing age; and we can no longer afford to support whole hosts of persons whose culture is neolithic. This problem will be solved in schools or it will not be solved at all. And it is time for the federal government to recognize it.

What Is the Role of the Professional in Education?

This is a question which the Report did not treat at all. In fact, one finds in the Report no awareness that there might be such a problem, although the mere existence of a White House Conference devoted to major policy questions in education must inevitably raise such a question. The Conference was, after all, the high point of the citizen-committee movement. Its organization was based on the stated request that there be two laymen at the Conference for every professional. Was this proportion proposed because of want of confidence in the professionals? Did it derive from an assumption that the professionals were not competent to decide major questions or operate schools? Why should there be a desire on the part of laymen interested in education to outnumber the professionals?

Questions such as these were simply ignored. That two laymen should face

each professional in making major decisions did not seem at all strange to the laymen, and there was surprise among some of the Conference officials when they learned that many educators regarded this disproportion as evidence of want of confidence in the profession, for the idea had not crossed their minds. Surely the time has come when questions of this scope should be brought into the open and discussed fully. This is a matter for major attention within the profession, and it certainly justifies very careful attention from federal, state, and local officials charged with responsibility for education.

The question of the professional's role is posed for us principally because of the nature of our own tradition. We have always believed in local control of education. Our tradition of political freedom, our relegation of government to the role of servant rather than master, is quite intimately tied up with our sense of the vitality of local management of affairs. And of these affairs, education has always been thought to be among the most important. Thus local control of education, far from being an incidental feature of the American political tradition, is central to the whole idea of freedom as we interpret it. This tradition must and will be maintained. But this same tradition has been interpreted to place policy control over schools in the hands of persons elected to serve on boards of education, and virtually of them are nonprofessionals. The superintendent of schools is supposed to be the chief professional school officer responsible for dealing with the nonprofessionals.

I think that one of the great contributions which might now be made by that constellation of agencies which made up the White House Conference would be to set forth, in unmistakable terms, defini-

tions of those questions which are professional and those which are lay, so that we can separate questions of technical policy, which the professional should control, from those of public policy, which are matters to be controlled by the nonprofessional.

I think also that the time has come when the professional associations should work out delineations of matters of technical policy. I hope for the day when the educational profession will pursue an educational quack as vigorously as the medical profession pursues a medical quack.

So, as I reflect on the problems of education as they looked to us at the White House Conference, and on the activities and reports of the Conference, I find myself thinking that the main value of the Conference lay in the public attention it attracted to those problems; not to boldness, originality, or thoroughness in outlining solutions to them, for I think those

qualities were conspicuously missing. I regret the failure to set forth solutions and to focus on certain problems which have long been with us and will be with us for many more years. I regret the years of delay in seeking public solutions to pressing problems, years in which educators were told to await the outcome of the Conference, only to find no solutions proposed when that outcome became known. I think we must now vigorously seek to lay before the public, solutions to the questions the Conference left unanswered.

But I welcome the increased public understanding of education and its problems. I welcome the closer ties and improved sense of mutual confidence which I think now characterizes the relations of laymen and professionals in education. Who can tell? From these improved relations there may yet come the launching of a new era in American education.

Michael Sadler's American File*

J. H. HIGGINSON

WARDEN OF SADLER HALL, LEEDS UNIVERSITY

MICHAEL SADLER enjoyed a long life which included three trips to the United States: in 1891-92, in 1902, and in 1930. The dynamic nature of his personal living has become almost a legend, and the very quality of bustling energy gave him an identification with the American way of life where famous visiting predecessors such as Matthew Arnold were iced up. Certainly no Englishman was more consistent over half a century in impressing on his countrymen the lessons to be learnt from American successes and failures, and none has preached more unflinchingly the conclusions which he put forward when speaking, on April 3, 1930, to the Pennsylvania Schoolmen about *An Englishman's Thoughts on the Service of American Education to the World*:

I feel that the greatest service which American education has rendered to the world lies in your sustained and generous faith that education rightly conceived and widely given, is one of the four best things in life and that, though education draws a great part of its power from many impalpable things in the spirit of the time and all time, and from the discipline and disclosure of each day's work and duty, an essential part of it lies in the science and art of teaching, which organised and costly effort alone can provide.¹

Scattered over my study desk here in Sadler Hall—a residence hall for men

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commemorating Sadler's outstanding work as Vice-Chancellor of the University of Leeds from 1911 to 1923—are the contents of his file on education in the United States. They comprise a miscellany of speeches in typescript; summaries made at the turn of the century on the notepaper of the old Board of Education library in Cannon Row, London; unpublished lectures and memoranda galore; jottings in exercise books for lecture series (for example, that superscribed University of Manchester—Lectures on American Education—Wednesday evenings January–March, 1904); personal correspondence ranging from that with William Torrey Harris and Nicholas Murray Butler to that with I. L. Kandel and Chancellor Brown of New York University; newspaper cuttings spanning the Atlantic, from the Philadelphia press accounts of his first impact on an American audience to the *Manchester Guardian's* generous reportage of one of his lecture series; and there are a few, too few, more permanently printed documents such as the three Sachs lectures delivered in 1930 before the faculty and students of Teachers College, Columbia University. Significantly, those three lectures bear the title *The Outlook in Sec-*

¹ Manuscript headed Pennsylvania Schoolmen, University of Pennsylvania, Philadelphia, April 3rd, 1930, entitled "An Englishman's Thoughts on the Service of American Education to the World," p. 15.

ondary Education: they represent but one of the many variations throughout the half century covered by the data before me, on the enigma which fascinated Michael Sadler and which he enunciated in 1902 by quoting Dean James E. Russell to support his own contention:

The cross currents of educational tendency are wont to meet in the secondary school. It is the secondary school rather than the elementary school which is the focus of the difficulties now most pressing in national education. This is true of America as of England, Germany, and France. The Dean of Teachers College in Columbia University, New York, has recently written: "In the field of education there are no problems more difficult to solve than those pertaining to the work of the secondary school. What is the aim of secondary education? What is its function in modern society? What knowledge is of most worth?"²

This quotation is even more indicative when we remember that a decade earlier, Michael Sadler's final point at a press conference recorded by the *Philadelphia Inquirer* had been:

Your common schools, I take it, go as far as our elementary schools in fitting pupils for the University. The next step we have to take in England is that of Secondary education—a medium between the Primary and the University.

These words in a yellowing newspaper cutting in the American file can now be seen to be curiously charged with the past and the future of Sadler's career. Within a couple of years he was to be an alert member of a Royal Commission on Secondary Education, an experience which would bring before him much evidence culled from the United States and initiate lasting friendships with American educators: also from this illumination was to come an idea of a new department

within the Education branch of the Government, and Sadler was to be the man who would translate this idea into living reality as first Head of the new establishment. In brief, one of the major Royal Commissions on Secondary Education in the United Kingdom, and the Office of Special Inquiries and Reports, both associated with the year 1895, received vital sap from the practice of American education. The track of how this came to be reveals an important continuity in Anglo-American studies by bringing together the names of Rev. James Fraser, Professor J. J. Findlay, Sir Joshua Fitch, Sir Michael Sadler, and Sir Robert Morant.

Amongst Sadler's personal papers are some 90 pages of a history of education which he did not live to complete. There are several appendices and in one of these he describes how, in the summer of 1895, he spent a few days on the Simplon Pass with Arthur Acland, who was then the energetic and forward-looking head of the Education Department. In the course of talks on Swiss education Sadler recounts that he said how much he felt that English interest in educational questions could be stimulated by making inquiries at home and abroad and by publishing special reports. Later Acland asked him to draw up a plan for a sub-department of educational researches and publication. Sadler testifies clearly as to the origins of this idea which he wanted the English government to translate into practice, and he notes in this appendix:

A study of the publications of the United States Bureau of Education in Washington, D. C., then under the direction of the Venerable Dr. W. T. Harris, with whom I had had many conversations during a tour which we made in Pennsylvania a few years before, had kindled in my mind a belief that a new organ of inquiry and report, if attached to the Education Department (as it was then called) in London might prove useful in

² *Education in Germany*, Special Reports on Educational Subjects, Vol. IX. H. M. S. O. London 1902, p. 140.

stimulating public opinion. But as our Education Department in Whitehall (and its twin the Science and Art Department at South Kensington) already published admirable and accurate statistics, this part of the work of the U.S.A. Bureau of Education would not call for reduplication here.

Thirty-five years later Sadler was to tell the Pennsylvania Schoolmen:

It was in the sunny temper of appreciation with candour but without detracting that William Torrey Harris, in whose company I was last in Pennsylvania, understood and encouraged the comparative studies which during and since his time have been one of the distinctive and most fruitful of the contributions of the United States to the educational thought of the world. The reports of the United States Bureau of Education for which Dr. Harris gave a distinctive form, and of which your government authorized a very liberal distribution, enabled students of education to follow for the first time in consecutive years, the educational movements of the age.

... the United States Bureau of Education under Dr. Harris led the way in making this branch of comparative study continuous and statistical. *It was his work that encouraged the British Government in 1895 to establish its department of educational inquiries and reports.*³

This detached reference and tribute to the inspiration of William Torrey Harris, since we have on the evidence of Sadler's own words his direct inspiration and instrumentality in founding the office of Special Inquiries and Reports, has curious historic truth. For though Sadler was the pioneer who turned the trans-Atlantic idea into concrete embodiment, he took up his duties as first Director fully knowledgeable of the attraction previous official visitors had felt by the Bureau in Washington. Early in his address to the Pennsylvania Schoolmen Sadler mentions

³ Quoted from pages 6 and 2 of *An Englishman's Thoughts on the Service of American Education to the World*.

the report of the Rev. James Fraser, quoting one of his chief conclusions:

*The thing that I should like to borrow from the United States is the noble public spirit, almost universally prevalent, which considers that to contribute to the general education of the people is the first duty, as of the Commonwealth at large, so of every citizen in particular.*⁴

Fraser's report has another interest in our story. His investigation into the "Common School System of the United States and of the Provinces of Upper and Lower Canada" was made a couple of years before the founding of the National Bureau of Education in Washington in 1867. But the idea of the Bureau was in the air and it captured the attention of this enquiring clergyman. He appended a commendatory footnote reporting a speech of Henry Barnard in which the proposal is put forward for a "Bureau of Education in the Department of the Interior." Noting that Mr. Barnard quite carried the opinion of the meeting with him, Fraser appends the resolution of the meeting:

That we hereby approve the measure of establishing at Washington, in the Department of the Interior, an educational bureau for the advancement of general and liberal education, and we would earnestly urge upon Congress the importance of establishing such a bureau.⁵

There is a direct connection between this anticipation in 1865 and, on the one hand, the first volume of reports published in 1897 under Sadler's Director-

⁴ *Ibid.*

⁵ Rev. James Fraser, Report to the Commissioners appointed by her Majesty to Inquire into the Education given in her schools in England not comprised within her Majesty's two recent commissions and to the Commissioners appointed by her Majesty to inquire into the schools in Scotland, on the *Common School System of the United States and the Provinces of Upper and Lower Canada*. H. M. S. O. London, 1866, p. 61.

ship, and on the other, the last two of the eleven volumes published during his tenure of office, Volumes X and XI, issued in 1902, devoted specifically to *Education in the United States of America*. With a brilliant touch of editorial perception, Sadler had invited Sir Joshua Fitch to supply the opening paper to Volumes X and XI on *The Study of American Education: Its interest and importance to English readers*.⁶ This compact essay has given much pleasure to my American colleagues, who generally have been unaware of its existence, and Sadler's discrimination has been commended. He remembered, of course, the *Notes on American Schools and Training Colleges* by J. G. Fitch printed in the Report of the Committee of Council on Education (England and Wales) for 1888-89. In these *Notes* Fitch details the work of the Washington Bureau and comments as being of special significance:

It is intrusted with the duty of collecting statistics and publishing and circulating information; but it has no authority. It cannot even enforce the production of figures or information, or impose any regulation or principles of action on the legislature of any State.⁷

About three years later Sadler was making his first trip to the United States. What a different first impression he made from that of his famous predecessor Matthew Arnold, of whose pioneering work in foreign educational studies he so often spoke with warmth. Armed apparently with three lectures (on *Literature and Science*, *Emerson*, and *Numbers*) Arnold made his debut in New York, having to

⁶ Sir Joshua Fitch, *The Study of American Education. Its interest and importance to English readers*. Special Reports on Educational Subjects, Vol. 10. H. M. S. O. London 1902, pp. 1-10.

⁷ J. G. Fitch, *Notes on American Schools and Training Colleges*. Macmillan, London, 1890, p. 15.

speak in a larger auditorium than any he had ever spoken in, and, according to Trilling,

the audience, unused to British intonation and perhaps distracted by the eyeglass, could not make out what he was saying. There were cries of "Can't hear you" and "Louder" and after a while people began to leave, General Grant amongst them, disappointed that a British lion should roar so inaudibly. Mrs. Carnegie told Arnold his voice was too ministerial. Mr. Carnegie suggested instruction in elocution. The problem of audibility was present throughout most of the tour, though after some coaching, by an Andover professor, in the trick of keeping his voice up, Arnold felt that he had improved.⁸

Impressions of Sadler's first impact are recorded in a handful of newspaper cuttings. He went out to address the first annual meeting of the National Conference on University Extension held in Philadelphia on December 29, 30, and 31, 1891. The programme announces three lectures by Sadler—who was generally credited by the press with a Professorship that he did not in fact possess at the time—lectures described in these terms:

... a Model Extension Lecture, being the second of the course on *The Change in Political Economy*, one on *The development of University Extension*, and one on *The function and organisation of Local Centres*."

Sadler, despite a rough crossing and delayed arrival, seems to have made his mark at once. The *Philadelphia Inquirer* reported:

The distinguished visitor seemed as much disappointed at his non-arrival in time for the announced lecture in the University Chapel on Saturday night as had been those interested in University Extension. But with his ruddy, healthy cheeks and clear voice, he gave assurance of a treat in his opening lecture at Association Hall this evening.

Thirty-year-old Mr. Sadler pleased the

⁸ Lionel Trilling, *Matthew Arnold*. Allen and Unwin, 1939, pp. 392-405.

Philadelphia Evening Telegraph, and it reported:

England, the centre of University Extension in Europe, has sent to the city, the centre of University Extension in America, another lecturer, Professor Sadler, who though boyish looking as he first steps on the platform, soon impresses his auditors as a man of remarkable originality and genial force. The courses which he is giving at Association Hall during his brief stay in this country are attracting much attention. . . .

The lecture last evening in the course on Socialism seemed to arouse the lusty resentment of the single-tax fiends. These men and women, for single-tax knows no sex, whose views on all questions of public policy are deformed and distorted by the absurd land theories of Henry George, always assert themselves with a vigour out of all proportion to their numerical strength. It is to be hoped that Professor Sadler will not be misled into thinking that America, or even Philadelphia, is becoming a headquarters for economic lunatics.

At the age of thirty-three, by English traditions very young for such public responsibility, Sadler was appointed as one of the 17 Commissioners for an investigation on secondary education on the authority of Queen Victoria, under the chairmanship of James (later Lord) Bryce. With his mind already awake to the dynamism of the American scene, Sadler worked with men whose endeavours furthered his background of information. One of these, J. J. Findlay, was instructed, as Assistant Commissioner, to prepare a *Report on certain features of Secondary Education in the United States of America and Canada*, and he issued his report ultimately from Toronto on November 5, 1894. Findlay records that he received a paper entitled *Heads of information which it is desired to obtain from the United States of America*, with a similar paper related to Canada. Three such questionnaires had been drawn up by the Commissioners for distribution to

the European countries, to the colonies of the British Empire, and to the various States of America. Copies of these questions, with the date of the replies, are reprinted in the volumes of the Royal Commission on Secondary Education, 1895. Findlay was told to try to get more complete answers than had been possible by correspondence. With reference to his briefing, he adds:

Further, I was instructed to examine two reports which have, in previous years, been published under Government authority: the voluminous account of the common school system of United States and Canada, presented by the Rev. James Fraser (afterwards Bishop of Manchester) to the Royal Commission (1867) and a brief account of American Schools by Mr. Fitch, Her Majesty's Senior Inspector of Schools, printed by the Education Department in 1889.⁹

On his arrival in the United States, Findlay first visited Washington and Baltimore, and spent several days with William Torrey Harris and his assistants at the Bureau of Education. In his subsequent report to the Bryce Commission on Secondary Education, Findlay devotes considerable attention to the work of this Bureau, originally commended in anticipation by Fraser and applauded in practice by Fitch. Findlay is much concerned to convey a clear picture of the scope of "the Federal Bureau," as he terms it. He noted the care which Dr. Harris took to distinguish between its work and that of an executive authority:

Without undertaking any educational act, the department assists others all over the States, both individuals and corporations, in the discharge of their tasks, by supplying them with information. Its duties are, in fact, similar to those of the Department of Labour, or those of the National Association

⁹J. J. Findlay, *Report on Certain Features of Secondary Education in the United States of America and in Canada*, H. M. S. O. London, 1895.

for the Promotion of Technical and Secondary Education in England. . . .

In addition to this statistical work, specialists are employed to inquire into foreign systems of education, and, in fact, the department may be regarded as a laboratory for scientific research in the field of comparative education.¹⁰

Findlay passes from the descriptive, to an argument in favour of establishing such an institution in England, an argument that obviously made a deep impression on the thinking of one active young Commissioner. There are discernible traces of Findlay's discussion in Sadler's many references throughout his long lifetime to the Washington Bureau, and one point in particular was to be reiterated, almost verbatim, by Sadler when called upon at a later date to justify the new department he had created. It is contained in the personal footnote Findlay added to his argument for such a new department being established in England:

It may, of course, be questioned whether such investigation is properly to be included within the functions of government. On certain sides of it the work might be equally well done by the pedagogic department of a research university: indeed, Professor G. Stanley Hall, at Clark University, devotes considerable attention to comparative education. *But a Government Office has advantages which no other organisation can secure.*¹¹

So also believed Sadler, and hence his ready acceptance of the invitation, on completion of the Bryce Commission's work on Secondary Education, to become the Director of the Office of Special Inquiries and Reports. One of the first tasks he gave himself amidst his new duties, was to use the example and experience of the Washington prototype to convince his fellow countrymen of the desirability, scope and functions of a

comparable institution to be centred in London. He set out to argue and persuade by reference to the tested experience of William Torrey Harris and his co-workers.

Findlay had in 1894 reported about the work of the Washington Bureau very fully for the Bryce Commission, and had added his personal recommendations about the example it offered, Sadler had taken up his Directorship in 1895, and the first volume of *Special Reports on Educational Subjects* was issued in 1897. This volume contains a miscellaneous collection of 26 papers ranging in topic from *Brush Work in an Elementary School* to *The Education of Girls and Women in Spain*. Suddenly, amongst these papers we come across an essay which seems quite out of character with the other contents, a paper entitled *The National Bureau of Education in the United States*. Although this paper was written by Sadler's newly appointed assistant, Robert Morant, the editorial hand of the Director is clear, and the tones of its tribute are unmistakable:

Every student of education is under a debt of gratitude to the United States Government for the work of the National Bureau of Education in the United States. Its volumes, published under the direction of Commissioner W. T. Harris, have probably done more than any other single agency to encourage the comparative study of the various systems of educational administration now in force in the different countries of the world.¹²

The strategic reasons for the inclusion of this paper in the first volume of *Special Reports* reveal themselves on a close scrutiny of the facts selected for presentation to the English readers. The theme

¹² R. L. Morant, *The National Bureau of Education in the United States, Special Reports on Educational Subjects*, Vol. 1. H.M.S.O. London, 1897, p. 647.

¹⁰ *Ibid.*, p. 362.

¹¹ *Ibid.*

of the paper is historical, its subject matter is the experience and practice of another country: actually, its teaching points are aimed at those who, in England, in the infant years of Sadler's new *Office of Special Inquiries and Reports*, are asking awkward questions about the justification and scope of such a research project. The Washington Bureau is represented as a new feature of centralisation amongst the organisation of the State systems of education. What Washington had become to the various States, it was suggested that London might become to the Empire. So, in a sense, the wheel comes full circle and what Fraser had anticipated, Fitch outlined with enthusiasm, Findlay recommended as an example, and Sadler translated into English practice and guided his assistant Morant to justify.

Whilst the two volumes of *Special Reports* devoted to *Education in the United States of America* were in the press, Sadler made his second trip to the United States, setting out in May and returning on July 28, 1902. His journey was semi-official, its chief task being an address on *Ideals of English Education* to the All-American Education Convention in Chicago, under the auspices of Nicholas Murray Butler. A member of the audience made this record:

The meeting was held in the old exhibition building and there were at least 7,000 people there, practically all teachers and educators from almost every state in the Union. Ernest spoke for 64 minutes, was heard all over the building and held the audience, as men who are competent to judge say they have never seen such an audience held. For all the last half hour at least of his speech, they hung upon every word. . . .¹³

During this visit he was made an LL. D.

¹³ Michael Sadleir, *Sir Michael Sadler: A Memoir by His Son*. Constable, London, 1949, p. 189.

of Columbia University. In the American file is a copy of the lecture on *Impressions of American Education* he gave on his return to the United Kingdom, to an audience in Glasgow. He emphasizes the American belief in education, and with a true Sadler turn of phrase characterises this: "Its ideal is not a selfish and exclusive culture, but scholarship engaged in social service."

A second compelling feature for Michael Sadler was the insistence on development of the individual, and this led him to a critical commentary on Dewey's *School and Society*. He agrees with the claim for each school to be a community, but feels that Dewey in stating needs gives little help in how to relate them to a changing society. The third impression he discusses is the conviction that great changes are impending in the subject matter of education. He gives his Glasgow audience four criticisms, dealing with (1) the education of coloured people, (2) the consequences of "politics" generally being regarded as a term of opprobrium and the misfortune this has for the administration of an educational system, (3) in his own words:

The besetting sin of some modern methods of education is that they stimulate interest without laying correspondent stress on intellectual disciplines. . . . The American passion for candy and ice finds its counterpart in the schoolroom. Nor does home restore the balance.

and his final caution (4) is with the tendency of American men to concentrate too much on business. He makes the following comparison:

One is tempted to say that a special danger of American life is the pursuit of material success in the spirit of idealism, while the converse danger in English life is the pursuit of ideal aims in a spirit of materialism.

From the variety of documents ac-

cumulated in Sadler's American file, a seminar on American education could be evolved by merely listing the names to which he makes frequent reference, often on a basis of personal friendship. In 1907 he wrote for the Fiftieth Anniversary papers of the National Education Association of America:

And may I, without doing injustice to the work of others, mention five names among great American educators, which are of especial significance to English workers in the educational field? Dr. William T. Harris, late U. S. Commissioner of Education. . . . President Eliot, of Harvard University, is another household name in this country. . . . President Butler, of Columbia University, by his unfailing helpfulness to English students and his unsurpassed knowledge of the various departments of educational work, has become as it were a *proxenos* for English students of education. The influence of President Stanley Hall has also been penetrating and far-reaching. . . . Fifthly, in its power of challenge and in its freshness of disintegrating criticism, the writing of Professor John Dewey is potent in English educational thought. I am not sure that it may not turn out that conclusions indirectly drawn from Professor Dewey's suggestions may divert from its old channels much of the traditional democratic thought on educational problems.

Other names recurring through this file of men obviously respected and admired are Booker T. Washington (meeting with whom was one of the highlights of the 1902 trip), President Hadley of Yale, Dr. Maxwell of New York, Dr. Paul Monroe whilst professor of history at Teachers College, Columbia University, Dr. Elmer Brown of New York University, and Dr. I. L. Kandel. Of the last-named he said in 1930:

And for the last few years the International Institute of Teachers College, Columbia University, has published a series of Year-Books which, under the able editorship of Dr. Kandel, provide by far the best materials

now in existence for a comparative study of the systems of education and of the movements of educational thought in the different countries of the world. Every student, every administrator of education, has reason to be thankful for the liberality which has made possible the preparation and publication of these indispensable volumes, and to rejoice that Teachers College has undertaken a work which is more suitably done by a non-governmental institution than under the restraints inevitably imposed upon a government department in the publication of comments upon educational development in other countries.

This tribute from the former Director of the Office of Special Inquiries and Reports, who felt that circumstances of restraint were such that he must resign in 1903, thereby provoking the Government to issue a *Blue Book*,¹⁴ has retrospective interest. His concluding comment on this phase of Teachers College activity might, with very little modification be adapted to the fruits of his own labours during the period 1895-1903:

Practically useful as they are to the present day scholar and administrator, Dr. Kandel's Year-Books will be indispensable to future historians of education.

The interpretative value of Sadler's eleven volumes of *Special Reports and Inquiries* steadily gains recognition, and I recall the appreciation of American colleagues at the 46th Salzburg Seminar on American Studies when they made their first detailed acquaintance with Volumes X and XI dealing with *Education in the United States of America*.

For Teachers College, to which he often referred, Sadler had a special affection, and the three Sachs Lectures he delivered there in 1930 on *The Outlook in Secondary Education* rank as one of the profoundest diagnoses Sadler ever made:

¹⁴ *Papers Relating to the Resignation of the Director of Special Inquiries and Reports*, Cd 1602, H. M. S. O. London, 1903.

they are lectures still discussed in England because of their farsighted appraisal of the problems of creating secondary education for all within the traditions of English society. The concluding words of these lectures live on as the declared goal of one residence hall for men, for the House Committee's *Rules and Government for Sadler Hall* ends:

A LIBERAL EDUCATION

As has been said, the object of these House Rules is to help towards securing for each student in residence an insight into, and some experience of, a liberal education. Michael Sadler himself delineated what such experience means, in these words: "We realize that a liberal education is a discipline of body, mind and spirit; a discipline which is not individual only, but also communal. . . . We perceive that the presence of a liberal education is not signified exclusively by any label, certificate or academic degree; above all, that a liberal education does not mean the absorption of inert ideas in cramming for an examination. It is evinced in an attitude of mind, liberated from apathy and from self-will, in an attitude of mind towards life, work, duty and the realities of belief."¹⁵

From this statement of objective, it will be seen that in Sadler's native Yorkshire an attempt is being made to achieve something of what he discussed with Dean William F. Russell in correspondence in April 1931:

You strengthen my conviction that we are near the end of one historic period: that, with the swift change-over to a new type of society there will fade away the current (and too academic) ideal of a liberal education: that the new liberal education will find its secret in a much closer correlation between (1) physical movement (and skill) and (2) emotional and intellectual activities:

that with the new stress on the body and its beauty, which the change will involve, there will be (as before, in the Hellenic and Hellenized Roman worlds) danger of license and moral degradation: and that therefore the new liberal education should find (or turn to) a strict kind of gay self-control.¹⁶

A strict kind of gay self-control. The phrase sums up Michael Sadler with peculiar aptness—that most English of Englishmen, with a mercurial tincture from the European scene and Huguenot ancestry. And in the shadowed days of 1939 he sat down to record conclusions and impressions which remained in his mind "as a deposit from study" of English education "during the last fifty years." This unfinished manuscript is one of the most exhilarating in his file, certainly one of his finest comparative studies. In the course of his ample survey he makes this final comment on the American contribution to the development of education:

The Americans are now leading the world in comparative study of systems of education. With the help of some of their wealthy and far-sighted Foundations, they have set a high and costly standard for reports on the actual working of schools and of methods of examination—and this not only in the United States but in some European countries also. Without American subsidy and initiative we British would know much less about education in East and West Africa than we do to-day. In new social enterprises the Americans are quicker off the mark than the English. Through their familiarity with the phenomena of the "melting pot," they are more alive to the assimilative power of popular education. On the other hand, there is now an undertone of disquiet in American educational opinion. Shadows have fallen upon the optimism with which it was once supported. There is now a note of misgiving in many American books about education.

¹⁵ Sir Michael Sadler, *The Outlook in Secondary Education*. Bureau of Publications, Teachers College, Columbia University, 1930, p. 56.

¹⁶ From photostatic copy of letter at Teachers College, dated April 22, 1931, sent from the Master's Lodgings, University College, Oxford. I am indebted to Professor George Bereday for the copy.

Inexorable questions, not only of political principle but also of fundamental beliefs, have begun to raise their heads. This change in the climate of their educational thought makes Americans find our English hesitations less unintelligible.

The curtain rang down on Michael Sadler's eighty-two years on the morning

of October 14, 1943: before the end, he had foreseen that amongst both peoples there would be many heart searchings and gropings for the sociological form which more education for all young people would demand after the second world upheaval.

Clifford Brewster Upton, 1877-1957

Teachers College, 1902-1957

I HAVE known Professor Upton for many years. It has been my good fortune to work with him as a colleague and to have him as a friend through the entire period of my membership on the Teachers College staff. But though this has been a substantial time, it is only a small part of the period of his association with Teachers College. More than a half century ago—in 1902—he first came to Teachers College as a teacher of mathematics in the Horace Mann High School. In the years that followed he worked side by side with Dean James Earl Russell in building our College into an institution of national and international reputation.

As I have studied the record of his service to the College I have been amazed at the variety of responsibilities he carried. He moved rapidly to headship of the Department of Mathematics in Horace Mann High School and then into the faculty of the Department of Mathematics of the College. He had hardly become established in this department when Dean Russell began calling on him for administrative service. He became Secretary of the College in 1911. In this position he played an increasingly important role, taking on additional duties. In 1915 he also became Director of the Bureau of Publications and in 1920 Provost of the College. Under his leadership the multitude of administrative requirements of a rapidly developing institution were met.

But Professor Upton's career as an administrator was only a prelude. He was deeply and continuously devoted to his chosen field of scholarship—mathematics. Even when he was carrying a heavy administrative load he maintained his connection with teaching. When the College had successfully passed through the years of rapid growth, he requested that he be permitted to return to full-time work in the Department of Mathematics. He realized that the foundation of mathematical preparation was receiving too little attention. And being a man always concerned with dealing with problems at their root, he turned his energies to the improvement of the teaching of arithmetic in the elementary school. He devoted himself unreservedly to this field and made a notable contribution to its improvement.

Hundreds of students studied under his guidance. They recognized in him not only a leader in his field but a man to whom they could turn for help. His assistance smoothed the way for many and his vision of teaching challenged all.

But he saw that vitalizing the field of his interest required that still larger numbers of teachers be reached and so he undertook the preparation of improved instructional materials. His textbooks have embodied in practical form the ideas which he developed through his study and teaching. They have been eminently successful, proving a source of assistance

to countless teachers throughout the nation.

Professor Upton was a man who looked ahead, who always saw something new worthy of his effort. Consequently, it is to be expected that his passing leaves unfinished work which he had planned. He had hoped to write a book on the teaching of mathematics which would be an aid to future generations of teachers. It is to be regretted that time did not permit him to do this, for his richness of experience and depth of knowledge would have made it a most useful product.

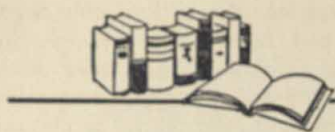
A few years ago friends and admirers of Professor Upton established at Teachers College a fellowship in the teaching of mathematics in his honor. This was

most appropriate, for it suggests his two outstanding characteristics—concern for students and faith in the great importance of his chosen field of study.

To Mrs. Upton, who also was professionally associated with the College and who is our dear friend, we extend our sincere sympathy.

For a man like Professor Upton all of us can indeed be thankful. He has left a great heritage in the institution to which he devoted so much of his life and he has been a cherished friend to countless students and colleagues over his long and fruitful career.

HOLLIS L. CASWELL
President, Teachers College



REVIEWS

Trial Balance: The Education of an American, by Alan Valentine. New York, Pantheon, 1956. 283 pp. \$4.50.

Alan Valentine came up fast in the world of higher education. A product of Swarthmore, where he won both athletic and scholastic honors, he later became a Rhodes Scholar. While his three years at Balliol were not crowned with the highest academic honors, he did become the second American in history to win an Oxford "blue." He came back to Swarthmore as Dean and an American officer of the Rhodes Trust. Four years later he was made Master of Pierson College and Director of Admissions at Yale. After three years in these posts he became—at the age of thirty-four—President of the University of Rochester.

One spoke of him then (the year was 1935) in the same breath with Robert Maynard Hutchins, who had been only a little younger when he too had left Yale, a few years before, to become president at Chicago. But Valentine never made the splash in the educational world generally that Hutchins did. He cultivated his garden at Rochester, and if no exotic blooms appeared, there was no word of horticultural failure either.

After fifteen years as a university president, Valentine resigned to enter public service. Following a solid performance as Chief of the Marshall Plan in the Netherlands, he was made Administrator of Economic Stabilization in 1950, following the outbreak of war in Korea. His experience in this post was unhappy, being terminated after a few months by his resignation at the request of President Truman.

Valentine has now written an autobiography of sorts, the focus being on what life

has taught him. He divides it into two parts, "Education by Plan," which deals with his academic career, and "Education by Accident," which considers what he learned from public life. It is a curious book.

To begin with, the author has chosen to write of himself in the third person, as Angus. One suspects that this is partly out of compromise with an impulse fully to follow the example of Henry Adams. At any rate there are frequent references to Adams' famous *Education*. The Angus device proves awkward, however. And for Valentine to have invited comparison with Adams seems unwise.

The book is full of disillusionment and disappointment. Valentine repeatedly expresses his conviction that he has always really been a pretty ordinary sort of fellow. And he is more often than not sharply critical of his formal education and of the academic world generally. He is, for example, scornful of his three Master's degrees: one granted in English Literature by the University of Pennsylvania on the basis of odds and ends of courses taken there and at Columbia—none of them including attention to "Shakespeare, Milton, the Romantic poets, or any other English literature between 1400 and 1800 after his sophomore year"—; one bestowed by Oxford in return for payment of the usual fee; one awarded *privatim* by Yale when he went to that institution—evidently to remove from him the curse of not being a Yale man!

Valentine's animadversions on the life of a university president have a certain fascination. "They have little or no time to teach or do research, or even to think or read, unhurried." "Gregariousness without intimacy is . . . [their] professional fate. . . ." "Any alternative proposed by a president is as

dubiously regarded by his faculties as legislation suggested by the White House is viewed by the Senate . . . it comes from outside the club." Memorable—and amusing—is President Angell's warning to Valentine, as President-Elect, that he would become a man without close friends in the profession: "They treat me as if I were a delicate invalid or a mental case, or with the polite tolerance they would use toward the Dalai Lama or a Harvard man."

Intimacy was, however, something that Valentine seems never to have been able to achieve at any time in his life. He liked to be alone. Yet as he reviews his life, his inability to give himself completely to others, his lack of emotional development, his inhibitions in the realm of art are what he regrets most of all. Here his education had most vitally failed him.

These revelations are worth pondering.

KARL W. BIGELOW
Teachers College, Columbia

The Psychology of Careers, by Donald E. Super. New York, Harper and Brothers, 1957. x + 362 pp. \$5.75.

During the past decade or so, Donald Super has been like a giant relentlessly traversing the "field" of vocational guidance, uprooting and discarding useless shibboleths, rearranging whole areas of knowledge, and planting and cultivating the seeds of new ideas as needed. Almost overnight, so to speak, a new vista of vocational guidance has appeared as a result. The potential of the vista opened by this man is practically limitless. The theory of vocational development presented so masterfully in *The Psychology of Careers* will orient public policy, training, practice, and research in vocational psychology for many years to come. However, as the author would undoubtedly agree, the book is but a beginning. The road ahead is charted somewhat, direction markers are placed, but much work lies ahead.

Those who have followed closely the writings and lectures of Professor Super over the past decade will welcome this synthesis of his thought. The book makes available in somewhat revised form many of his frequently referred to papers and several to which the reviewer has just been introduced.

Interwoven throughout the book's organization are the propositions of Professor Super's 1953 paper, "A Theory of Vocational Development." Here, however, these propositions are greatly augmented and synthesized through a four-part organization: (1) "The Nature of Work," consisting of four chapters; (2) "The Course and Cycle of the Working Life," seven chapters dealing with the self concept during the work stages of exploration, transition, trial, establishment, maintenance, and decline; (3) "The Dynamics of Vocational Development," ten chapters dealing with the concept of vocational development itself, with the influence of aptitude, interest, personality, family, economics, disabilities, and chance on vocational development, and with the process of synthesis; and (4) "Implications and Applications," in which, in two chapters, are considered the problem of vocational adjustment and general adjustment, and implications for policy and practice of the emerging theory of vocational development.

Stressed also throughout the book is the idea of thematic extrapolation of career patterns as well as the principle of counseling as hygiology, both of which concepts have been presented earlier. But interwoven with the rest is the wisdom accumulated by Professor Super in the preparation of his *Appraising Vocational Fitness* (Harper, 1949). In the recent publication, however, vocational development rather than the tests themselves provides the principle of organization. The result is more stimulating than the previous one.

Chapter 2 deals with the impress of work on the way of life and contrariwise, and Chapter 3 with the varieties of work. In the development of these chapters, however,

Professor Super becomes overly bemused by the sociologists' arguments about social class, and unnecessarily delays development of his own arguments because of excursions into these problems. Vocational psychologists must certainly remember that much of the behavior they wish to examine in vocational development is related to social class as variously defined, but relationships established in terms of social class are useless to a vocational psychologist who seeks relationships among concepts *with which he may interfere at will*. It is true that Professor Super's tortuous explication of social status and social class eventually leads to his own classification of occupations. However, the classification is really like an appendix; it was generated, but it was never used again throughout the book. Largely in these chapters are the faults the reviewer has sensed in the book; there is irrelevant discussion of socioeconomic scales and of social status, there is slight naiveté in discussion of the meaning of a scale and in the description of three-dimensional representation of data.

Chapter 4 deals with life spans and curves of output associated with occupations. It introduces a classification of occupations novel to the reviewer and possibly of greater potential than the classification climaxing Chapter 3. This novel classification is by ordinary time of entry and departure from an occupation and suggests much more about occupational choices and, consequently, vocational development than does the earlier classification of occupations. The notion of an entry occupation has, of course, been exploited in the *Dictionary of Occupational Titles*. Professor Super's joining of this concept with that of time of departure from the occupation in a two-way classification intrigues the reviewer considerably, however.

As stated earlier, Professor Super considers in Part 3 established associations between entry status with regard to tests and later performance in a situation chosen by a person qualified for entry. The section also considers a few established associations among pre-entry test status and type of

choice exercised by the person. In its entirety Part 3 has marvelous consistency and integrity. Although some of the organization of this section originated in *Appraising Vocational Fitness*, the numerous improvements wrought in the classifications of aptitudes and interests are a true indication of the genius of the author. Empirical findings bearing on (1) qualifications for entry; (2) choice; (3) entry; and (4) success and satisfaction following entry are integrated in this section very skillfully.

The integration accomplished in Part 3 is not of the choice process alone, however. The pre-entry status conditions themselves are also integrated. The organization of the aptitude area follows *Appraising Vocational Fitness* rather closely. Interests are treated somewhat differently from before, however, and the same is true with regard to personality. Special consideration of family, economic, disabling, and "chance" factors did not appear in a systematic manner in the previous book at all.

The reviewer would suggest, with regard to the interest classifications used by Professor Super, that further integration of interest results may be possible from recognition that his four-way division of *kinds* of interest represents merely a stated and tested variety of both preferences and actions. Additional simplification might result also from extending the author's own recognition that several of the seven *areas* of interest with which he has concerned himself represent a theoretical and applied interest in similar kinds of operations. If this thought were actualized, the seven areas of interest might be reduced to five—scientific, humanistic or social welfare, systematic, literary, and musical and artistic—with a subclassification of conceptual interest and interest in application within each. Then, too, readers might give some thought to another idea mentioned in this book, namely conceptual or applicatory frames of orientation toward relationships to be found in the *media* of objects, animals (except man), people, words, music, and art.

Part 3 is introduced by a differentiation Professor Super published in 1954 and has used effectively and frequently to order and justify his thought since that time. We mean, specifically, the distinction between what Professor Super terms "trait theory and the actuarial method" on the one hand and "life pattern theory and the developmental (thematic-extrapolative) method" on the other. It is dangerous to link the actuarial method with trait theory on one side of this dichotomy as Professor Super has done. The implication is that the thematic-extrapolative method is thereby freed from the requirement of demonstrating the relative frequency of coincidences between actual later events and predictions made from application of the rules of thematic-extrapolation. We are sure that the author has no such intent, but we feel that this point needs to be made more explicit than it is in the book. We can garner information not provided by a statement of current status when we introduce time into an analysis of case data and when we invent specific hypotheses about the way a person reacts to situations which are consistent with already known facts. However, to construct a science we must ever keep before us the dictate to systematize such procedures to a degree whereby it is possible to state publicly both rules for using data, and stable success rates resulting from application of these rules to data under specified conditions.

This book gives to the field of vocational guidance an integrity it has long needed. The reviewer seconds the author's statement that the emergence of theories of vocational development has revitalized the field of vocational guidance. Much needed research lies ahead of us, of course, but our concepts stand forth with clarity sufficient, even now, to justify revisions in public policy concerning the practice of vocational guidance and the training of vocational counselors. When will we start on this next step?

DAVID V. TIEDEMAN
Harvard University

The Negro Woman's College Education, by Jeanne L. Noble. New York, Bureau of Publications, Teachers College, Columbia University, 1956. x + 153 pp. \$4.25.

At a time when the position of women is receiving close scrutiny, Dr. Noble makes a valuable contribution to the literature in this analysis of the college experiences of a group of Negro women as described by them five years after graduation. Aside from the intent and purpose of discovering life needs of Negro women and whether colleges met those needs, another goal is accomplished. With an awareness of the present struggle for integration, the writer relates her findings to this era of social conflict. Quite frankly she states, "this study hopes to contribute to knowledge that might aid in integration."

One great strength of this book is the historical and sociological data it includes and the author's interpretation of the impact of these data upon the unique needs of Negro women. Dr. Noble has laboriously traced the development of education for this group from the days of slavery to the present. Her collection of "historical notes" in Appendix A is both valuable and interesting.

A logical approach to the presentation and analysis of the responses to a questionnaire received from the 412 Negro college women produced three chapters concerning the graduates: who they are, what they wanted, and what they received.

A more meaningful study was made possible by the use of the unstructured interview. The questionnaire findings were submitted to ten selected outstanding women who were then asked to comment freely upon them. These comments present varied insights into concepts of training for a particular occupation or profession, preparation for marriage, preparation for citizenship, rules and regulations governing Negro women students, student-faculty relations, the Negro woman's self-concept, and integration.

Other significant questionnaire items sought information regarding schools attended, marital status, occupation, income, membership in organizations, community participation, evaluation of college experiences, selection of a preferred statement defining general education, the extent to which college education for men should be varied for women, and specific suggestions for the college education of Negro women.

The author has done Negro women a great service. She reports and interprets without offense to those who may deplore the strictly racial limitation of the study. It is particularly significant that she draws the conclusion that this group needs no special education apart from other women, but that attention must be given to "distinguishing needs" which call for "a personally orientated education with room for individual differences and needs." These differences and needs, it is shown, grow out of the following situations: there are almost twice as many college graduates among women as there are among men in the Negro population; more Negro college women than white college women work outside the home; and Negro college women place more emphasis on vocational preparation than do white college women.

Readers who look to this work for some startling revelation will be disappointed. The author quotes extensively and comments sometimes at length on the various items from the questionnaires. Thus is built a case for college education for women rather than college education for Negro women, as the findings are interpreted through historical, philosophical, and sociological approaches. The study received the 1955 Pi Lambda Theta award for outstanding research in the area of women's professional problems. The interest and encouragement given the author by the Commission on the Education of Women of the American Council on Education gives further evidence of the value of this study to educationists. The book provides thought-provoking reading for anyone who would

look critically at the education of women in the past and in the future.

EVELYN B. MARTIN
Florida A. & M. University

Supervision as Co-operative Action, by Muriel Crosby. New York, Appleton-Century-Crofts, 1957. xii + 334 pp. \$3.50.

Supervision as Co-operative Action helps the supervisor who conceives his purpose to be "providing service to the teacher, not evaluating the teacher," to view many aspects of a program of supervision. It is a book which leads the reader to think supervision. Through the work of Mrs. Slowe, *Helping Teacher in the Alden School System*, the reader has an opportunity to observe in action a supervisor in a city school system. The last section of the book, "Recurring Concerns and Issues," treats problems related to areas such as grouping, self-contained classrooms, and work with parents. The unity which has been developed during the preceding chapters seems at times to be destroyed, but the reader is helped to relate this section to the remainder of the book by viewing through Mrs. Slowe's eyes questions related to the areas.

Early in the presentation the author establishes her philosophy of supervision, and the referent for the remainder of the discussion. She points out as the major objectives for the program: practicing effective relationships, deepening insights and understandings, widening vision, increasing know-how, and refining processes and techniques. (p. 21) She sees the major problem areas as: establishing working relationships directed toward stimulating teacher growth, participating in continuous curriculum development, participating in the development of cooperative action programs in school and community, and dealing with recurring concerns and issues in education. (p. 22)

Dr. Crosby makes the point that supervision is most effective in helping create sound learning situations (1) when it contributes

significantly to the solution of problems considered important by the teachers as well as the supervisors, (2) when the teachers help decide what the supervisory service should be, (3) when it provides an atmosphere of acceptance, support and understanding, and (4) when it fosters a scientific approach to a study of problems. (p. 22)

The reader is allowed to share Mrs. Slowe's thinking, to read materials she prepares, and to follow her as she plans conferences, observes teachers in their classrooms, participates in classroom demonstrations, works with groups, develops supervisory records, and carries on the initial work in a program for developing basic curriculum guides for the system. Reflected throughout the many activities described are the author's two basic operational beliefs: (1) that supervisors must be resource persons to teachers, and (2) that the fundamental objective of in-service education and growth will be achieved only through cooperative action in meeting practical problems teachers face in their daily work.

One of the chapters which supervisors will find most helpful describes a system-wide program for development of curriculum guides—plans provided for teachers having a major voice in all policy-making decisions and in the actual production of the guides. The chapter contains copies of plans, bulletins, progress reports, and curriculum overview charts prepared during the work. Mrs. Slowe's role in working on this project is viewed by the reader from the time the Elementary Curriculum Planning Committee in Alden invites her to be its chairman in the project for the development of the curriculum guides until the end of the second year of work.

Because this readable book shows a supervisor at work in a comprehensive supervisory program, it will be very helpful to new supervisors who are trying to discover the ingredients in a "program of supervision" as well as to the established worker trying to evaluate certain aspects of his work.

MARCELLA RITA LAWLER
Teachers College, Columbia

Public Education in America: A First Course, by George R. Cressman and Harold W. Benda. New York, Appleton-Century-Crofts, Inc., 1956. vi + 480 pp. \$5.00.

There is no such thing as a universally usable text for the first course in American education. I doubt that there ever will be. The purpose of the course is not only to present an overview of the field but also to stress the slighted areas in the total professional program of teacher education. Since we do not have national standardization (and I trust we never will), the ideal work can exist only in reference to a specific situation. Another reason there will never be such a textbook is that the subject matter is now taught anywhere from high school through the graduate level.

The concept of readiness is a delicate one. Before psychologists made us aware of it, we assumed that the major difference between the lower and the higher grades was quantitative. The lists of spelling words in colonial primers show little concern for simplicity. At the other extreme are those few oversensitive reactors who would deny youth any experience with complex ideas and problems (and what real problems are simple?) on the grounds that they are not ready. Either extreme is disastrous to our educational system. Underemphasis of readiness causes inefficiency—a plain waste of time and effort. Overstress can unnecessarily dilute educative experiences into noneducative and miseducative ones. We must discover the appropriate balance, else we fail in our teaching.

What does this mean for the book by Cressman and Benda? After using it in a junior course in American education at Colorado State College of Education, I have reached the following decisions:

1. Students like it. Practically all said that it was an easy text. It is clearly and simply written, is pleasingly illustrated and attractive in format.

2. The chapter on child development serves little purpose here because by the

time our students take this course they have already had courses in general, child, and educational psychology.

3. Although the beginning hints that there is a relationship between education and the American faith, the work generally neglects the area of social foundations. The history is presented so sketchily that its potentiality to contribute to the understanding of the school as an institution of our culture is never sufficiently released. There are chapters on Canadian and Mexican education, but they do not serve adequately to indicate the significant school-society bond. While the material on nonschool agencies does point up that education also takes place out of the school, it offers nothing to clarify this societal role of the school.

4. The section on the teaching profession and the chapters on educational finance and desirable physical provisions are among the better developed portions. The inclusion of chapters on the curriculum, co-curricular activities, nonschool educational agencies, and education and international relations is definitely welcome. The organization of education is adequately described.

5. It is not a conceptually stimulating book, glossing over many of the major problems and issues until the last chapter, where separation of church and state, the

attacks on American education, and academic freedom are discussed in sketchy fashion.

To continue to use this text at the junior level of college would, in this reviewer's opinion, be in the nature of protecting pupils from a rich educational experience. The book seems generally organized on the old Herbartian notion that first we learn the facts; then we think; and lastly we apply. It is my belief that we must do more to interrelate facts and issues just as we must encourage evaluating at all levels, not only *after* we learn the fundamentals. In the terms of R. Bruce Raup in *The Discipline of Practical Intelligence*, we must coordinate the indicative *is* mood with the normative *should* one. Value judgments and facts must be perceived in a meaningful relationship. Feigning neutrality until the final topic may be less threatening psychologically, but it is also less challenging, less educational, and more like propaganda.

Public Education in America escapes having a textbook flavor and is highly palatable, but it suits neither my conception of the readiness of a college junior at our institution nor my ideas on how learning best takes place.

ROBERT M. WEISS

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TEACHERS COLLEGE RECORD

The Support of Research in Education*

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DEAN, AND PROFESSOR OF EDUCATION, TEACHERS COLLEGE

THE progress of any profession and the education of its personnel are halting, at best, and involve many lateral and retrogressive movements. There is good reason to believe, however, that changes in professional practices and in professional education are more likely to represent real improvements if they are based upon evidence resulting from research. Certainly for the education profession, research has been one of the powerful forces that have improved not only teaching and administrative practice but teacher education in the broadest sense as well.

Research that gives some assurance of bettering a profession must be of high quality, and this means that it is time-consuming and expensive. We have been conducting educational research for the past sixty years, but throughout this pe-

riod the financial support of research has been niggardly. Many of the better inquiries have been doctoral dissertations reporting the first and last research undertaken by their authors. Other investigations have been conducted by staff members of educational institutions, but in many cases at considerable personal sacrifice.

Within the past few years this situation has changed to some degree. Rather large amounts of money from "outside" sources have become available to people conducting educational research. Philanthropic foundations as well as a number of government agencies have shown greater interest in supporting educational research. One of the dramatic developments involving a government agency resulted from the passage, by the 83rd Congress, of Public Law 531. This law made available to the United States Office of Education a substantial budget to be used to support selected surveys, dem-

* This article is based upon an address delivered by the author on August 8, 1957 as part of the Teachers College All-College Lecture Series.

onstrations, and research studies. The present discussion is an attempt to examine this United States Office of Education research program and to look, too, at foundation support of educational research and some of the problems that are faced both by the foundations and by the recipients of their largesse.

CONGRESS PROVIDES FUNDS FOR EDUCATIONAL RESEARCH

The United States Office of Education itself conducts research studies—usually of the survey type. The professional personnel of the office, however, have felt for many years that federal money should be made available for experimentation and research in a variety of educational areas. Several requests were made of Congress for funds for this purpose but little progress was made until former Commissioner Brownell and his associates persuaded the 83rd Congress to take action. This Congress, by adopting Public Law 531, permitted the Commissioner of Education “to enter into contracts or jointly financed cooperative agreements with universities and colleges and state educational agencies for the conduct of research, surveys, and demonstrations in the field of education.” The law further stipulated that the Commissioner must seek the advice of educational research specialists “competent to evaluate proposals as to the soundness of their design, the possibilities of securing productive results, the adequacy of resources to conduct the proposed research, surveys, or demonstrations, and their relationship to other similar educational research already completed or in progress.” Approximately 1 million dollars was provided for implementing the provisions of this act during 1956-57.

This law is an interesting and important milestone in American education. It has

been liberally interpreted, particularly in reference to the expression “research, surveys, and demonstrations.” Commissioner Derthick strongly supports the research program of his office and was instrumental in persuading Congress to appropriate 2.3 million dollars for research expenditure during 1957-58.

THE RESEARCH ADVISORY COMMITTEE

In order to get some preliminary research planning done, the Office of Education appointed in 1955 an *ad hoc* Research Advisory Committee under the chairmanship of J. Cayce Morrison, Director of the New York City Puerto Rican Study. Other members of the committee were Frank Hubbard, then Director of the Research Division, NEA; Erick L. Lindman, Professor of School Administration, George Peabody College for Teachers; Willard C. Olson, Dean of the School of Education, University of Michigan; and H. H. Remmers, Director of the Division of Educational Reference, Purdue University. In due course this *ad hoc* committee was made the official advisory committee and four people were added to it: Ruth E. Eckert of the University of Minnesota, Ralph W. Tyler of the Center for Advanced Study in the Behavioral Sciences, C. J. Van Slyke of the National Institutes of Health, and Dael Wolfe of the American Association for the Advancement of Science. Arrangements were made for this permanent committee to meet at least three times a year, with extra meetings called if necessary. The term of membership was to be three years.

The Advisory Committee agreed upon three major headings for research and under these headings, ten major research areas. Heading A, “Conserving and Developing Human Resources,” included

the following four research areas: Education of the Mentally Handicapped, Development of Special Abilities of Students, Educational Aspects of Juvenile Delinquency, and Retention and Continuation of Students in Schools and Colleges.

Heading B, "Housing and Staffing for the Nation's Schools," included two research areas: Staffing the Nation's Schools and Colleges, and Present Status and Future Needs.

Heading C, "Educational Implications of Expanding Technology and Economy," included four research areas: Implications of Expanding Technology for Vocational Education, Educational Problems Resulting from Population Mobility, Educational Needs of the Low-Income Rural Families, and Educational Uses of Television.

The general idea was that universities, colleges, and state educational agencies would propose investigations falling under one or more of these headings. Each proposal would then be studied by the Advisory Committee, using the following criteria:

1. The study must be expected to have a demonstrable value to education within a reasonable time.

2. It must be concerned with a problem on which progress had been delayed because of wide gaps in knowledge.

3. It must have significance for the country as a whole.

4. Preference will be given to new projects or to those in which duplication will be desirable as a scientific check on earlier conclusions.

5. Consideration in relation to each project will be given to: (a) the competence of the person who will direct it, (b) the research resources of the institution under whose egis it will be directed,

- (c) the scientific merit of the project, (d) the extent to which the project will help to develop research personnel, and finally (e) the need for research in the area proposed in relation to the total educational research picture.

The Advisory Committee went about its work in a businesslike fashion. Each member independently reviewed every proposal and "scored" it on a 1-5 scale for the degree to which each of the criteria was met. Proposals which were judged unanimously to be worth while were recommended. Others were discussed by the committee. In some instances suggestions for improvement of the projects were made.

As has been said, for the year 1956-57, about 1 million dollars was appropriated by Congress in support of Public Law 531. Over half of this amount, actually \$675,000, was earmarked for research devoted to Education of the Mentally Retarded. By November 1, 1956, the Committee had studied 130 proposals submitted by 100 educational institutions and agencies. Twenty-nine were recommended. By June, 1957, the committee had reviewed 316 proposals, recommended favorable action on 108, and 72 had been contracted for. About 1 million dollars of federal money was obligated in support of these contracts for the year 1956-57 and an additional 4.2 million dollars to carry the projects through to completion, assuming the continuation of Congressional appropriation for educational research. The contracting institutions committed themselves to contribute about 2.3 million dollars or 36 per cent of the total cost of the research undertaken in the first 72 contracts.

Some idea of the kinds of inquiry being encouraged by the Office of Education is given in the following list of

projects, institutions, and major investigators involved in the sixteen contracts most recently signed (through August 1957).

INSTITUTION	PROJECT	MAJOR INVESTIGATOR
Arizona State College at Tempe	Investigation of Mental Retardation and "Pseudo-Mental Retardation" in Relation to Bilingual and Subcultural Factors	Willard Abraham
New York State Education Department	Educational Outcomes Under Single- and Two-track Plans for Educable Mentally Retarded Children	J. Wayne Wrightstone
University of Minnesota	Daytime Educable Retardates Compared with Institutional Retardates	Maynard C. Reynolds
University of Wisconsin	Perception of Symbols in Skill Learning by Mentally Retarded, Gifted, and Normal Children	Virgil E. Herrick Theodore L. Harris
University of Chicago	Educational Motivation Patterns of Superior Students Who Do and Those Who Do Not Achieve in High School	Paul H. Bowman
University of Pittsburgh	Educational Plans and Decisions in Relation to Aptitude Patterns	John C. Flanagan
University of Wisconsin	Decisions of Youth About Education Beyond High School and Factors That Influence Them	J. Kenneth Little
University of Chicago	Motivation of Youth for Leaving School	Paul H. Bowman
University of Minnesota	Attitudes and Other Characteristics Associated with Secondary School Home-Making Teachers' Ability to Maintain Desirable Learning Situations	Roxana R. Ford
George Washington University	Use of Supervised Correspondence Study to Relieve the Teacher Shortage	Blake S. Root
Southern Oregon College	Integrating the Humanities and Social Science in a Block Teaching Project	Arthur Kreisman
Stanford University	Community Understanding as a Factor in the Financial Support of Public Education	William R. Odell
Stanford University	Organization of the Study of Education	W. H. Cowley

Syracuse University	Influence of Adolescent's Social Values on Personal Relations with Other Adolescents and with Teachers	Eric F. Gardner
University of California	Attitudes of High School Students as Related to Success in School	T. Bentley Edwards
University of New Mexico	Problems of Adjustment of Indian and Non-Indian Children in the Public Elementary Schools of New Mexico	Miles Zintz

CONTRACTS WITH TEACHERS COLLEGE

Three Office of Education contracts have so far been negotiated with Teachers College, Columbia University. One is for a four-year study of the effect of nursery school training on the subsequent educational experience of the mentally retarded. This is one of the more generously financed of the USOE projects and is under the general direction of Professor Maurice Fouracre.

The second Teachers College contract supports a study, directed by Professor Irving Lorge, of the terminology and concepts that are used in appraising the mentally retarded.

The third contract involves collaboration among an association of 32 major universities called the University Council for Educational Administrators, Teachers College, and the Educational Testing Service at Princeton. This study is under the general direction of Professors Daniel Davies and Daniel Griffiths and is an attempt to identify the factors that are associated with successful school administration.

The experience of Teachers College in negotiating research contracts with the United States Office of Education has been good. The professionals from that Office have been cooperative and helpful.

One difficulty has arisen from the government policy of providing only 15 per cent of a total budget for indirect costs. The result is that approximately half of such costs must be borne by the contracting institution. At least this is the case for Teachers College. Our cost studies indicate that if the direct expenditures for a particular research project total, say, \$100,000 during a single year, the total cost to the College of the project is much closer to \$133,000 if we charge to it its *pro rated* share of expense for housing, communications service, library, student services, budgeting, central administration, and similar indirect costs. This means that institutions analogous to Teachers College contribute approximately 15 per cent of the total costs of a research project that is considered to be subsidized by the United States Office of Education. The attitude of the government may be that this provides some test of the earnestness of the contracting institution. It also discourages some institutions that might be excellently qualified to do high grade research from submitting proposals.

EVALUATION OF USOE RESEARCH PROGRAM

It is impossible at present to appraise the consequences of the research being

subsidized by Congressional appropriations to the United States Office of Education. Planning, appraising, budgeting for, and getting major research projects under way is a complicated and difficult process and takes time. It has proved to be harder for the Office of Education to clear contracts for projects than was at first anticipated. At least this is one inference to be drawn from the fact that it was not until late in 1956-57 that most of the funds appropriated for that year were committed.

Although few of the studies supported by these USOE funds have been completed, the significance of making federal money available to support educational research by other than federal agencies cannot be overestimated. The most obvious advantage is that the research projects give promise of improving professional practice in education. A second, less obvious advantage, and this assumes that funds will regularly be allocated by the USOE to other educational institutions and agencies, is that research as a regular part of the operations of all of these institutions—colleges, universities, and state agencies—will be encouraged. The likelihood that the USOE funds will be used to support continuing research by state departments of public instruction is particularly encouraging. If these organizations increasingly benefit in their decision-making and actions from research, the USOE grants might then constitute a kind of seed money that will make it easier to get funds from other sources as well. In its first year relatively little support was given through USOE grants to research actually conducted by state departments of public instruction. It is conceivable, of course, that few applications from such agencies were received.

It is to be hoped that most of the funds made available to the Office of Education

in support of research in the future will continue to be used to subsidize studies conducted by universities, colleges, and state educational agencies. There is some support for the proposal that the Office of Education employ its own staff of research specialists. In the judgment of many people, however, this would be a serious mistake in that it could easily mean needless duplication of research facilities and personnel.

The Office of Education research program apparently rests on the assumption that if excellently trained and well-supported investigators discover and report the truth, this will in due course result in the improvement of educational practices. This is the conception of the relationship between the findings of educational research and the improvement of educational practice that has obtained, generally, since the earliest talk about the science of education. There is some reason to believe that we consistently overestimate the amount of improvement that comes about merely because reports of research indicate that certain things should happen. In the future the Office of Education may encourage some research that is designed to learn more about what must be done in order that educational institutions can improve. There is a rather widespread belief that self-study will lead to improvement, but relatively little is known about ways and means for directing and encouraging and nourishing self-study so that maximum improvement will take place.

PHILANTHROPIC FOUNDATIONS AND EDUCATIONAL RESEARCH

At the latest count¹ there were some 6,000 foundations in the United States

¹ *Giving: USA*, 1957 Edition (New York, American Association of Fund-Raising Counsel, Inc.), pp. 31f.

engaged in philanthropic giving. The total assets of all 6,000 approximate 9 billion dollars. So much of this wealth is now in common stocks that a precipitate rise in the market in one day can add as much, on paper, as 50 million dollars to total foundation assets. Each of eighty of the larger foundations has more than 10 million dollars in assets. Many foundations are small. Seventy-seven of the largest control more than two-thirds of all foundation resources. The five most generously endowed foundations with their approximate net worth are as follows:

Ford, 2.5 billion dollars
Rockefeller, 500 million
Carnegie, 250 million
Sloan, 135 million
Kellogg, 124 million

So far as the support given research by philanthropic foundations is concerned, Andrews contends that "Scientific research is still a small part of the activities of the foundations as a whole but it does characterize the programs of many of the leaders."²

During 1953-54, the 77 largest foundations used approximately 16 per cent of their expendable funds to support scientific research. This comes to about 27 million dollars. Another group of 37 of the largest foundations reported that during 1953 they contributed 10.5 million dollars for social science research. If the 77 largest foundations gave this same percentage for social science research, which is conceivable but not probable, this would represent a maximum total of 13 to 14 million dollars. It is almost impossible to make an estimate of the percentage of this amount that went for

educational research. In all likelihood it would not exceed 1 million dollars.

What this means, of course, is that the amount of money contributed by philanthropic foundations through 1953-54 for research in education was small. In the first year, under Public Law 531, the United States Office of Education probably provided as much.

It is inevitable, given the large number of American philanthropic foundations, that their policies and practices in respect to the disbursement of their funds would vary appreciably. Even among the largest foundations there has, historically, been a difference between those that tend to support men considered by the foundation officials to be exceedingly creative, resourceful, and productive and those that tend to support projects. This is not a sharp dichotomy but it illustrates a basic difference in policy.

Within the past few years there seems to have been a decrease in the disposition of some of the foundations interested in educational research to make grants to institutions that had independently arrived at judgments regarding the research they wanted to do. This situation seems to be most clearly illustrated by the Fund for the Advancement of Education, whose officials do not seem disposed to wait for the initiative to be taken by institutions competent to do research and then provide grants in support of the projects considered most important by these institutions. On the contrary, the procedure appears to have been for the officials to attempt to interest colleges, universities, or school systems, not always directly, in inquiries or demonstrations regarding problems or practices that the officials believed to be critical. This has led many people to feel that the officers of the Fund were convinced that certain educational practices

² F. Emerson Andrews, *Philanthropic Foundations* (New York, Russell Sage Foundation, 1956), p. 258.

—the use of teacher aids, classroom television, an apprentice type of teacher education—were good, and therefore the Fund was willing to devote large sums of money to demonstrating their worth and advertising their merits. This apparently was what happened in connection with the so-called Arkansas Experiment in Teacher Education. Evaluation was an afterthought. This impression that the Fund is somewhat committed to certain solutions to current educational problems is reinforced by Woodring's recent report on 24 projects in the areas of teacher education and recruitment supported by the Fund to the extent of about 8 million dollars.³

There is one serious consequence of foundations or government agencies having available large amounts of money that might be given to universities which are willing to conduct research on problems the officials of these fund-granting organizations consider important. This consequence is the thousands of man-days spent by research personnel developing

proposals that conform to the real or fancied interests of the foundation or government agency. This tends, of course, to remove decision-making regarding what inquiries should be conducted from the persons who presumably know most about the area in question, namely, the investigators themselves.

CONCLUSION

Funds in support of educational research come from a variety of sources. They can represent a fraction of the student fees paid for tuition; they can come from tax sources, endowment income, individual gifts, foundation gifts, government subsidies, and corporation or business gifts. Most of the research in education, however, is not supported in this fashion. It is made possible by faculty members who, as part of their regular appointments, and in addition to heavy teaching schedules, spend a great number of hours conducting investigations. Almost all of the educational research that has had an influence upon current educational practice has come out of overtime, so to speak, of these dedicated men and women.

³ Paul Woodring, *New Directions in Teacher Education* (New York, The Fund for the Advancement of Education, 1957).

General Education in a Complex University*

EARL J. McGRATH

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SOME months ago, a well-known Eastern university sponsored a conference on the topic "General Education at the Crossroads." In this meeting there was an atmosphere of doubt as to whether the developments which have been described by the term "general education" are really permanent features of American higher education. In fact, some of the speakers seemed to believe that the scrapping of the whole general education movement might be imminent. Their uninspired and uninspiring proposal, if one read between the lines, appeared to be that, instead of going forward or even off to the right or left of the course on which we have embarked, we should make a 180-degree turn and return to the happy days of specialization.

In spite of these views of a minority group of educators, there is not the slightest doubt that the forces which brought programs of general education into being are today stronger than ever. We sometimes forget that there has always been

a group of vigorous thinkers among the older professional guilds who have seen the dangers of the narrowly educated mind. In the study of relationships between liberal and professional education now being conducted by the Institute of Higher Education, the views of the various professional groups on general and liberal studies are being reviewed. It is encouraging to observe the many incisive and cogent arguments advanced by lawyers, doctors, engineers, and men in public office many years ago in favor of a broad base of general education as a prerequisite to, or an adjunct of, specialized studies. In 1876, for example, the American Institute of Mining Engineers in a meeting in Washington, heard Mr. A. L. Holley say:

It is useless to disguise the fact that the want, not of high scholarship, but of liberal and general education, is today the greatest of all the embarrassments which the majority of engineering experts and managers encounter. . . . it seems of the first importance to promote . . . a public opinion, that liberal and general culture is as high an element of success in engineering as it is in any profession or calling.

Similar sentiments were expressed a few years earlier by a distinguished jurist and teacher of the law, Mr. Justice Story,

* Dr. McGrath was U. S. Commissioner of Education, Office of Education (now the Department of Health, Education, and Welfare), from March 1949 to April 1953. He was President and Chancellor of the University of Kansas City, Missouri, September 1953-1956.

in the address at the time he assumed the Dane Professorship at Harvard, on August 25, 1829. Dramatizing the value of a broad education, Justice Story expressed the opinion that:

Many of our most illustrious statesmen have been lawyers; but they have been lawyers liberalized by philosophy, and a larger intercourse with the wisdom of ancient and modern times. The perfect lawyer, like the perfect orator, must accomplish himself for his duties by familiarity with every study. It may be truly said that to him nothing that concerns human nature or human art is indifferent or useless.

The concept which undergirds the developments of the past quarter century in general education is not new in the world of learning, but for a period it lay dormant under a blanket of technological progress and academic specialization.

THE AGE OF SPECIALIZATION

After the passage of the Morrill Act in 1862, the center of gravity in American higher education began to shift from general to specialized studies and many professional schools sprang into existence. The extent to which this process has advanced can be seen in the number of first degrees granted in various types of curricula in 1900 and in 1950. In the fields of agriculture, business administration, engineering, and education the total of all degrees granted in 1904 was 6 per cent, but by 1951-53 this figure had risen to 49 per cent of the total. And these figures must be corrected in terms of the practice of permitting considerable flexibility in election of specialized courses within the Bachelor of Arts and Bachelor of Science degrees themselves. Furthermore, even within individual courses—for example, elementary zoology, psychology, and sociology—the subject matter until recent years reflected the narrowing vocational

interests of research scholars, rather than the broad cultural purposes of genuinely educated men and women.

The demands of practical-minded laymen outside institutions of higher education combined with the coercive power of the academic hierarchy created a higher education in this country which, however well it may have prepared its patrons for their duties as workers, sent out in increasing numbers men and women who were, as one scientist put it recently, "hardly any better informed or intellectually curious about many aspects of modern life than the man in the street." A quarter-century or more ago, a few perceptive, nonconformist, courageous educators saw the need for broader education in our colleges and universities. As a result of their activities, imaginative programs of general education were inaugurated at Columbia, Chicago, Colgate, and the University of Florida. Through the years these programs have changed in almost every respect—content, method, organization, administration, evaluation, and even in specific aims and objectives. But the overriding purposes of providing a broad education for the general responsibilities of life in a democratic society have persisted essentially unaltered. What is more important to observe today is that the scattered developments of a quarter-century ago have now spread to several hundred institutions. This revolution in higher education has been accomplished in spite of overt counterattacks in faculty debates and professional societies, and "cold wars" in which the powerful weapons of promotion, salary, and status in polite academic society have been strategically employed.

In academic circles, one continues to hear many questions about all aspects of general education. These questions, with a few exceptions like those raised in the

meeting already referred to, do not relate to the permanency of general education. They are concerned with ways and means to strengthen existing programs and to adapt them more closely to the needs of the rapidly changing conditions of modern life. There is no doubt that we shall continue to be concerned about the extension and improvement of general education as we shall constructively extend and improve our efforts to meet the challenge of communism. And success in the former will be a function of success in the latter.

FORCES STRENGTHENING GENERAL EDUCATION

There are several forces now at work in American society, however, which will accelerate the development of general education and probably require still further changes in its purposes and character. It will be instructive to examine these forces.

The first springs from the thoughts and actions of leaders in business and industry. It would be easy to prepare a long list of names of chairmen of boards of directors or presidents of firms who have unequivocally urged the broader education of their future employees. These men, who engage a large percentage of the graduates of educational institutions which prepare men and women for their future technical responsibilities, express dissatisfaction with the narrowness of specialized education. They point out that even those who are vocationally competent often lack insight into the types of human relationships which create, impair, or destroy morale in a complex social organization such as a business or an industry. The same lack of knowledge in the social sciences which handicaps men in their personal relationships with their associates also restricts their

understanding of the place of the business enterprise in the total fabric of American society. A broader knowledge of the social sciences and the humanities, these leaders believe, even at the expense of technical instruction, would produce more competent, better-adjusted, and happier individuals—a great asset in any corporate enterprise.

Business leaders assert, moreover, that it is such men and women who advance to top managerial, planning, and policy-making positions. It has been said that the views of the president of a firm on the values of general education are belied by the actions of the personnel officers who hire college graduates. Hence some educators advise students to disregard the idealistic rhetoric of the leaders in choosing a course of study. This is a dangerous practice for two reasons: we are obviously in a period of readjustment in which old practice is only slowly catching up with new policy. By the time today's students are tomorrow's employees, an even higher value will doubtless be placed on general education. Furthermore, industrial leaders are emphasizing that it is the broadly educated man who *risks to top positions*. At best, therefore, advisers can say that excessive and premature specialization gives one an "initial vocational advantage," but that men and women of enterprising spirit who eventually seek positions of broad responsibility are increasing the probability of success by pursuing a broader course of study.

But vocational efficiency is not the sole aim of public leaders. They also point to the value of general education in the discharge of the responsibilities of citizenship in our complex world. The business enterprise itself, like our own personal lives, is more and more being affected by public policy expressed through federal

and state laws. Indeed, our free enterprise economy is profoundly influenced, if not shaped, by events in the world at large outside our own boundaries and by friend and foe alike. National policies at home and abroad must be enlightened if we are to survive and prosper. Whether they will be wise or foolish policies will be determined in this democratic society with universal suffrage by the wisdom or the folly of individual citizens. Informed and wise decisions cannot be made by ignorant and foolish citizens. In a very real sense, then, the range of knowledge, the intellectual skills, and the moral standards of citizens will determine not only the good or bad health of our domestic economy but our position in the world. A growing number of leaders in business, industry, the professions, and government recognize these facts of contemporary life. They urge a more inclusive education for all, regardless of their vocational aims and aspirations.

A BUSINESSMAN'S OPINION

No one in American society has made a better case for general education, especially for those who are planning to enter business, than Clarence Randall, Chairman of the Board of Inland Steel. The Randall lectures, given at Harvard late in 1956, are destined to be classics in this field. They deserve to be read by members of the academic profession and by thoughtful citizens generally. Two of Mr. Randall's statements in those lectures represent the advanced thinking of business leaders in regard to the value of general studies. In regard to the need for broader education for success in large corporate organizations, he says:

As I have walked along the old familiar paths of the Harvard yard and passed once more through the very gate through which I first entered some 48 years ago, I have

wondered what my thoughts would have been had I then known how my life was to develop. . . . I am profoundly grateful that I did not know as a freshman what course my life would take, for had I foreseen it, I am positive that the general education which has given me such deep satisfaction would not have come to pass. Had older friends known that I was to spend my life in the steel industry, they would have insisted that Greek and Latin were a waste of time and would have demanded that I specialize in metallurgy and other technical studies. I could not then have answered that there have been few chief officers of steel companies who were trained as metallurgists, nor stated my firm belief that there is no type of specialized education that can insure success in so-called top management.

In speaking of the need for understanding the society of which we are a part, and particularly the social institutions which give direction and meaning to our lives, Mr. Randall states:

I find no relationship between technology and freedom, but believe rather that the advancement of the concept of liberty rests entirely upon the cultivation of the mind and the spirit of man through the processes of general education.

Another opinion increasingly common among those who engage the graduates of such professional schools as engineering and business administration is strengthening the position of general education in our colleges and in our culture. Many business and industrial leaders believe that even the instruction which relates directly to vocational competence is too narrow. They disapprove of an enormous multiplication of courses which deal with highly specialized branches of business and engineering at the expense of general principles which, in the hands of a person of competent intellectual skills, should have wide application. Indeed, many industrial leaders assert that they prefer students educated in the prin-

ciples of their profession who can be trained after graduation in the special problems or techniques of specific organizations.

These attitudes among the consumers of the product of colleges and universities explain the fact that some of the most productive deliberations concerning the values of general or liberal studies in a professional program have been occurring in the engineering profession. Indeed, one who observes the analytical curriculum studies and the thoughtful utterances of engineering educators cannot fail to come to the conclusion that, in reassessing the values of general education in a professional curriculum, the members of this profession are ahead of many of their colleagues in the other professional schools and, paradoxically, also in some liberal arts colleges.

When one considers the vital concern among professional groups in strengthening the broad foundations of specialized study, he is forced to speculate that the professional schools may outstrip the liberal arts colleges in the development of a pattern of higher education which prepares students not only for professional competence but also for the more comprehensive activities of thoughtful citizenship and a rich personal life. In any event, this is a time when professional faculties will regard sympathetically any proposals for the inclusion in their curricula of instruction which is genuinely broadening in its influence.

All types of institutions and all members of the profession should welcome the current opportunities. The American philosophy of educational opportunity is being swiftly realized at the college level. Clarification and reaffirmation of the purposes and the character of general education are needed as institutions of higher education attempt to serve larger num-

bers of youth. New conceptions must be used in the restructuring of courses in the various divisions of knowledge—in the humanities, the social sciences, and the natural sciences. They will have implications for the reorganization of all aspects of institutional life, such as student activities, housing, and athletics. Our concern at present, however, is with the over-all organization and administration of the general education enterprise.

ADMINISTRATIVE CONSIDERATIONS

One of the most vexing problems in this connection is the proper location of the program in the total structure of the institution. This problem is more acute in the large complex university than it is in the smaller liberal arts colleges. Yet, even in the latter, the matter of separate integrity or integration with the specialized work of the various departments is a recurring and often troublesome question. As in the case of all other organizational or administrative arrangements, each institution must devise structures and functions which fit its own purposes, personnel, and processes. Plans which are quite satisfactory in one place may be totally inapplicable and inoperable in another.

Various types of organization and administration of the general education program have, however, now been in operation long enough to justify some fairly reliable observations concerning their relative merits. Take the matter of the physical separation of the administrative responsibilities for general education from those of the several schools or colleges. Any president may well ask whether there should be a dean or director who has primary and final responsibility for the administration of all matters related to general education, that is, curriculum, faculty, budget, and students. A common

alternative is to leave these matters in the hands of the dean of the liberal arts college or, less commonly, to a faculty member who is supposed to provide educational leadership in the absence of real administrative control. Experience dictates that the general education program should have at its head a person definitely charged with administrative responsibilities in regard to courses of study, the selection and promotion of faculty, the preparation of a budget, and the selection and retention of students. Where these matters remain under the jurisdiction of persons whose primary interests are in a more comprehensive unit, a school or college with specialized as well as general instruction, general studies almost always suffer. These statements of principle may mean very little in the abstract, but they acquire real significance in application.

A SEPARATE ADMINISTRATIVE UNIT?

An example will make clear the need for an administrative officer responsible for general education. First, in regard to the teaching staff, it can be said that general education, like all other types of instruction, succeeds or fails to the extent that good or poor teachers are giving the courses. Unfortunately, most persons even within the same subject-matter field do not teach different courses equally well. Members of the staff who may be expert in advanced specialized instruction may be quite ineffective in elementary courses for non-major students. Though teachers who do *not* know their subject well *cannot* teach effectively, it does not follow that those who do can.

Hence a selection of teachers whose knowledge, interests, and professional objectives predispose them toward competence in general courses must be made by a person or group genuinely interested

in the success of such courses. Administrators whose first loyalty and primary interest gravitate toward specialized courses in the upper divisions of the liberal arts college, or in the professional schools, do not generally give adequate care to the selection of faculty for the special purposes of general studies. When their attitudes are hostile, the situation is hopeless, regardless of faculty interest. Hence it is essential that some administrative officer have specific responsibility for faculty recruitment and welfare in connection with the general education program. This officer should be prepared to advocate promotions and increases in salary for the members of the general education staff under his jurisdiction, just as deans of the several other colleges represent their faculties in the determination of rank, salary, and the other perquisites of teaching. Experience shows without question that the general education program usually suffers under any other administrative arrangement.

THE NEED FOR ADMINISTRATIVE INTEGRATION

It does not follow, however, that this autonomous administration requires organic separation of the general college program from all other units in the institution. An administrative policy which permits the head of general studies to engage staff without regard to the needs or opinions of other administrative officers who preside over units which students enter after having completed their basic general requirements is unwise and self-defeating. Such a practice often leads to debilitating interdepartmental conflicts. It jeopardizes the status and the professional future of young faculty members. It often dams up the flow of new knowledge and intellectual stimulation from advanced instruction and research into gen-

eral courses. And, in the long run, it arouses animosities and divisiveness which, except under the strongest central administration, will eventually undermine the entire general education effort.

In one large university in which the general education program was placed under a completely separate academic and budgetary administration, an immense amount of pulling and hauling occurred between the teachers in the lower college and those in the upper college, the graduate divisions, and the professional schools. Mutual stimulation, which is the life blood of the academic organism, was greatly curtailed, the benefits of research activities were minimized, and the conditions of life were made less pleasant than should be the case in academic communities. It is no exaggeration to say that many of the teachers of advanced students looked upon those in the general college as a lower form of academic life. And the most regrettable feature of this dramatic situation was the eroding of the foundation of the general education program which began as soon as the chief administrative officer (whose power had maintained the program) left the institution. It appears that a battle was brilliantly won but a war ineptly lost.

To be sure, the general program needs strong central administrative support and a large amount of self-determination. Dr. James B. Conant, recognizing the many strong forces in the academic political system which militate against those who take an interest in general education, advocated to the Board of Harvard University the setting aside of 10 million dollars for the salaries of those who gave a large portion of their time and energy to the teaching of general courses. Yet he would be the first to defend the Harvard practice of enlisting the most renowned scholars in the teaching staff of the gen-

eral education program and not separating this program from the nourishing influences of those who give advanced instruction.

The ideal administrative arrangement appears to be one in which many of those who are responsible to the head of the general education program for certain instruction are also responsible to the head of another division of the institution for other teaching or research. Under this arrangement, instructors teach both general and specialized courses each academic year, though the proportion of each may vary from time to time. The allocation of teaching, or for that matter of research responsibilities, then becomes a combined undertaking on the part of two or more administrative officers. The general courses flourish best when some of these joint assignments involve a dean of one of the professional schools.

EXPERIENCE IN ENGINEERING

One of the most significant statements in the recent report "General Education in Engineering," a superlatively good educational treatise, is the opinion that the general education program is most effective and most enduringly grounded in those institutions where faculty members from the liberal arts colleges and the engineering schools developed the courses jointly. This judgment ought to be instructive to all who plan and administer general education in multi-purpose institutions. Where men and women teach both general and advanced liberal arts courses or give professional instruction, administrative relationships are more complicated but the end result is usually better. To be sure, since two or more human beings have to combine their judgments about a teacher's value, about his readiness for promotion or raise in salary, sometimes chief administrative officers

will have to intervene to protect those who serve primarily in a general college. The outcomes of this more complicated system are superior to those in a system where a general education unit exists by and for itself.

It is sometimes argued that unless the director of the general education program has full and sole responsibility for the rank and salary of the members of his staff, the latter will suffer in both respects. It is true that in present academic society, department heads and deans customarily urge preferred treatment for those members of the staff who teach advanced students, do the most acceptable research, and produce the largest bundle of publications. It is also true in some institutions that if the heads of departments have final authority, they will assign the younger and less able teachers (not necessarily the same persons) to the general education courses. The cure for this situation is not the establishment of a separate faculty even at equal salaries and rank, but the establishment of the concept that the general courses deserve the same quality of teaching as the others. This can be achieved most lastingly by inducing as many as possible of the ranking members of the faculty to take an interest in general studies. It should be added parenthetically that the influence of the president is crucial in this situation. In fact, it is a defensible generalization from experience in many institutions that without the support of the central administration no satisfactory program of general education can be established or maintained.

Another serious administrative problem arises out of the very purposes of general education. By definition general education provides experiences which students ought to have in common, regardless of their vocational or other life objectives. That is, the general courses

should introduce the student to the key ideas in the various subject-matter areas, give him an opportunity to master the intellectual methodologies and skills employed by scholars in these disciplines, and cultivate the attitudes and values which characterize a liberally educated mind. Those who successfully pursue such instruction should be able to communicate with one another about the common problems of contemporary life. They ought to stand on common intellectual and cultural ground. It has been argued by many, therefore, that all should have identical experiences in the general education program; that is, they should take a sequence of courses in the natural sciences, the social sciences, and the humanities which are as much alike in content and method as human variations among teachers permit. Indeed, early efforts to organize a general program of studies—for example, the survey courses at the University of Chicago and at Colgate—rested almost entirely on the principle that all students should pursue identical instruction.

UNIFORM OR VARIED APPROACHES TO GENERAL EDUCATION

There is something to be said in favor of this uniform approach to the goals of general education. It represents a justifiable substitute for the chaos of the elective system, or even the distribution system, under which two graduates from the same liberal arts college might have only a dozen hours of instruction in common. On the other hand, students ought to be able to reach clearly identified educational goals through many avenues. The intellectual skills, the methods, many of the main ideas, and the ideals of the scientists can be acquired through varied scientific study. Likewise, the characteristics and

the values of great literature, the vicarious experiences which it provides, the standards of judgment which it cultivates can be made available to students through the study of a variety of literary works. It follows, then, that opportunity should be provided, within the limits of cooperatively derived and generally approved objectives, for the individual teacher to develop alternative types of instruction to the same ends. Under the latter plan of curricular organization, it is feasible for several instructors or groups to devise varied courses made up of somewhat different subject matter, experiments, and methods of investigation, all of which would achieve essentially the same goals of general education in natural science. The same can be done in the humanities and the social sciences.

FREEDOM TO EXPERIMENT

One of the advantages in this loosely federated republic of letters is that it provides many of the freedoms of experimentation and teaching which attract people to the profession and sustain their interests in it. Another advantage lies in the intellectual adventure this freedom provides and the educational responsibility it imposes, both of which are largely missing in a rigidly prescribed curriculum pattern. Moreover, such a system offers opportunity for experimentation with various types of subject matter and method that is the only real guarantee of advancement in education at any level. Teachers feel free to improvise new teaching procedures to meet the needs of different classes, grades, and interests among students. If, however, this system of personal freedom and initiative is to operate effectively and with a minimum of abuse from those who wish to ride their own intellectual hobbyhorses or exploit their own special academic interests,

certain administrative checks are needed. There must be approval of the course content by a faculty committee and the administration, and some common method of measuring the results of instruction.

EVALUATION IN GENERAL EDUCATION

Evaluation is one of the most important administrative problems in general education. If there is to be larger freedom for the individual instructor in the organization and presentation of subject matter, there must concomitantly be a valid measure of the results. The common pattern of evaluation in recent years has been a battery of objective tests uniformly administered. This type of evaluation is the natural, if not the necessary, accompaniment of the standardized curriculum. Enormous advances have been made in the past twenty years in the development and validation of testing instruments that can be used to appraise the outcomes of general education. It has become possible to compare the achievement not only of individual students but also of different classes and of different institutions. Much good has come from the use of those objective tests, the better of which assess intellectual processes other than those of rote learning, memory, and identical reproduction of ideas and processes. The more recent of such tests also measure the ability to use various intellectual skills, to see relationships, to deduce, to infer, to compare, and to reach valid conclusions. These tests will continue to serve valuable purposes.

Experimentation is needed now, however, with types of evaluation of changes in student behavior that have to do with personality, value systems, continuing interest in intellectual things, and personal adjustment. One of the most discouraging reports of recent years is that made

by Professor Philip Jacob of the University of Pennsylvania, in which he reviewed a number of researches on students' values and their modification during the college years. This is not the place to review these findings in detail. It is enough to point out that few substantial changes in values were discovered. In view of the preoccupation of many teachers with subject matter; in view of the inflexible determination of the modern scholar, even in the humanities, to avoid evaluative judgments in his teaching; and in view of the problems of mass education with which many institutions are confronted, the results in the Jacob report are perhaps not surprising. To those, however, who see in education something more than the teaching and the learning of facts uncolored by any consideration of the larger purposes of life, of the philosophic system in which the facts are intermeshed, or of the influences of extra-class activities, these findings are profoundly disturbing. On the basis of a priori reasoning rather than experimental evidence, they suggest, first, that our educational objectives may be too narrow and perhaps too vague and, second, that our instruments of evaluation are in serious need of evaluation.

It would seem desirable to supplement the present battery of objective tests by other forms of instruments, such as rating scales, faculty opinion, and essay-type statements, which involve the marshalling of evidence and precise expression, and actual performance. Just what these forms of appraisal would reveal concerning the intellectual, aesthetic, and social growth of students cannot now be determined with any exactness. But that they might reveal evidence that would cause basic changes in curriculum organization and teaching method is clear. In any event, a dynamic program of general education

ought to provide for freedom of evaluating as well as for freedom of teaching.

ARTICULATION WITH ADVANCED INSTRUCTION

A final administrative and organizational problem has to do with the articulation of the basic general courses and advanced instruction in the same or related disciplines. Until the general education movement was launched, curricula in colleges and universities were organized on the assumption (tacit or expressed) that instruction should be organized as a sequence of courses beginning with elementary or introductory *this or that* and extended through the most advanced reaches of the subject. In a sense, each student in elementary zoology was treated as a future research specialist in that or a related field such as medicine. That only a small, sometimes negligible, percentage ever reached the goal or even finished a college program of any kind did not weigh heavily with the curriculum makers. As curricula in liberal arts expanded under the pressure of new knowledge and the special interests of research scholars, increasing attempts were made to crowd more and more preparatory material into the first course. The student who desired, or under the distribution system was expected to have, a broad liberal education achieved this goal by assembling in his record a collection of unrelated courses introductory to advanced instruction which except in his major field of interest he seldom pursued. This practice was justified by the statement that, to get his teeth into a subject, the student had to have advanced courses and that learning could only take place when the logic of the subject was completely developed step by step. The first of these views leads one to observe that since in any but the major subject

the student did not advance beyond the introductory course, he must have had a poor intellectual diet. The second rested on a false psychology of learning which emphasized the acquisition of small elements of knowledge rather than the understanding of the interrelationships of discrete experiences through generalizations.

In any event, it is now the opinion of many leaders in the various disciplines, as for example Dr. Sidney J. French and Dr. James B. Conant in science, that a general course in science not only acquaints the student with the evolution of the scientific enterprise but perhaps more efficiently than the first course in one of the sciences, such as physics and chemistry, gives him a broader and firmer knowledge of science—the intellectual skills and the attitudes toward natural phenomena which make possible a rational interpretation of reality. The same can be said for the humanities where superficial surveys of English literature from Beowulf to Hardy have been displaced by an exhaustive treatment of a few pieces of great literature. It is interesting to observe that these developments have followed a course laid down by President Lowell of Harvard in a letter to W. J. V. Osterhout in 1909. He wrote:

It seems to me that one of the crying needs we have is general, as distinguished from merely introductory courses; courses which will give to the men who propose to go no further and whose pursuits will lie in other lines, such a general knowledge and interest in a subject as every cultivated man ought to possess; the kind of knowledge that will always be making him learn more. . . .

The general course, if properly constructed, can stand on its own feet. It is, however, different from the first course which launches the student on a career in one of the disciplines. How, then, are the

general courses to be articulated with the advanced for those who wish to go on? This is a troublesome problem, but it can be solved. Fundamental in the solution, however, must be the concept that institutions of higher education have a responsibility to students who wish to become more enlightened citizens as well as to those who aim to become specialists. It is not unfair, therefore, to propose that instead of constructing general courses to articulate easily with advanced courses in related fields for the relatively small percentage of future majors, effort should be made to reconstruct second and third courses to articulate with the courses which the non-specialist students have in common.

There is no one easy or correct way to bring general courses and advanced specialized courses into nice articulation. One device has been to exempt from a given general area such as natural science those who definitely know they are going to specialize in a scientific field such as engineering, medicine, or physics. This arrangement has some disadvantages. In the first place, it really skirts the problem of articulation. But, secondly, many students do not know when they enroll what their major interests are, and even those who have an opinion often change it in the college course. Furthermore, the coverage of subject matter and skills is narrower in one science than in several. Students who have had many courses in physics may have had none in geology, zoology, or astronomy, and sometimes even little instruction in chemistry. The same narrowness can be found in other fields. Lastly, the general course in science, as Dr. Conant points out, is not the same intellectual experience, or shouldn't be, as the introductory course is in a specific field.

The resolution of this annoying prob-

lem, which is acute with transfer students, must be delayed until we have more valid measures of achievement in the various fields of knowledge. When the faculties are satisfied with the available instruments of evaluation, the solution will lie in an examination program in which the student can satisfy the general education requirement at any time, even at admission, by passing the appropriate tests. Until then certain mechanical expedients will have to be used in most institutions, such as allowing future engineers to begin the study of mathematics and science with the usual elementary instruction in these fields. In the case of transfer students, rough equivalences will have to be accepted in the various broad subject areas. Enterprising faculties will, however, take the only reasonable step by recognizing the value of the general first course and reorganizing later instruction in such ways as to preserve the values inherent in the general course without repeating the knowledge, principles, and skills in advanced teaching. It will then be possible for our institutions of higher education to serve both the specialist and the average intelligent citizen who wants to, and should, know something about the varied aspects of the complex world in which he lives.

To achieve this objective, those who

give general courses and those who teach advanced students will have to work cooperatively and harmoniously toward the development of a rounded program of higher education suitable for all without penalizing either the future professional practitioner or the average citizen.

There are other administrative and organizational problems in general education, such as the proper integration of various subject matters within a given course, consideration of which would unnecessarily extend the present discussion. It should be apparent that the administration of a general education program, or any other education effort, can make it succeed or fail regardless of its merits. It should also be clear that faculties ought to have full opportunity to discuss the problems of organization and administration. This does not mean administration by committees, which is always inefficient and ineffective. It does mean that a steady flow of advice and suggestions between faculty and administration can remove misunderstanding, enliven interest in general education, improve morale among those who teach, and, most important of all, guarantee that the program will endure and be improved in accordance with new knowledge and new conceptions of general education in a dynamic, democratic society.

The Outlook for College Teachers*

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ONLY the expanding number of children to be taught in the elementary schools has been more widely publicized than the need for competent teachers at all levels—elementary, secondary, and higher—in the American educational system. Not so well known, however, are (a) the sources from which recently employed new college teachers have come; (b) their sex; (c) their distribution among the teaching fields; and, perhaps most important, (d) their competence for the teaching assignments they undertake. The purpose of this discussion is to point up certain findings of a recently completed study of college-teacher supply and demand by the Research Division of the National Education Association in which these and similar questions were explored.¹

Researchers in this field find very few benchmarks from which trends can be traced. And the problem is further complicated by the absence of any established criterion for the identification of a "quali-

fied" candidate for college teaching. An acceptable applicant in one institution may not be so considered in another. Requirements also vary among departments, and even among specific subjects, in the same institution. Employing officials on some eighteen hundred campuses are at liberty to exercise individual judgments, and to accede to or resist the exigencies of the moment. Perhaps nowhere else is the independence of the individual institution in American higher education better illustrated than in the selection of appointees to the instructional staff. It has not seemed possible, therefore, to identify a group in the general population which comprises the new "supply" of college teachers, as has been done at the elementary and secondary school levels.

For each of the past ten years the school superintendents have been advised early in March of the approximate number of persons who would become eligible for the standard teaching certificate by the following September, separately by grade level and by teaching field. The employer of college teachers, on the other hand, has no advance inkling of the occupational ambitions or the teaching qualifications of persons about to graduate at the master's and doctor's degree levels. Until recently, in fact, there has been little or no information regarding the extent to which students fresh from the graduate schools should be depended

* Dr. Maul conducted the nation-wide study of college and university teachers' salaries published by the NEA Research Division in October, 1956. He developed the annual national study of teacher supply and demand at the elementary and secondary school level, now in its tenth year.

¹ National Education Association, Research Division, *Teacher Supply and Demand in Colleges and Universities, 1955-56 and 1956-57* (Washington, D. C., The Association, 1957), 76 pages. Single copies will be sent free upon request.

upon as a major source of the needed supply of new college teachers.

A further complication facing the researcher is the widely varying extent to which colleges and universities make use of part-time instructional personnel. Circumstances, not professional standards, sometimes dictate the use of many part-time persons in the college classroom. The presence of graduate students on a university campus, for example, is usually regarded as a rich resource. To date, little or nothing has been learned about the fitness of a good many of these students for the teaching assignments they assume, or even about their interest in classroom service as more than a means to an end. In fact, no way has been devised to count the number of persons who do part-time college teaching while engaged in something quite different as a major occupation. Certainly the use of part-time instructional personnel is not to be condemned, but the tools for measuring either the qualifications or the available number of this group do not seem to be at hand. It is likely, however, that the practice of employing individuals who can spare only part of their time for college teaching will steadily expand.

AN EARLY POSTWAR STUDY

Early in World War II Earl E. Mosier, then a member of the Research and Service Commission of the North Central Association of Colleges and Secondary Schools, undertook a regional investigation of certain staff problems at the higher education level. In the late forties, under the sponsorship of the National Commission on Teacher Education and Professional Standards, he developed the basis for a national study which, unhappily, was not continued.² Mosier pointed up

² Earl E. Mosier, *College Teacher Supply and Demand in the United States: Report for the 1948-49 School Year* (Washington, D. C.;

the new dimensions of the staffing problem which confronted institutions of higher education as a consequence of the rush of veterans supported by Public Law 346. The conditions he reported were generally considered to be only temporary, however, and the anticipated "return to normal" was expected to bring the supply of new college teachers into balance with the demand. Not even the most skillful "crystal-gazer" foresaw, in the 1946-1950 era, the continuing nature of the staffing problem, and the sponsorship of Mosier's efforts was not extended, despite the foundations he had laid for a periodic study.

THE RECENT PAST

Since the future supply of college teachers is not readily identifiable, a look at the newly employed teachers during the past few years should be meaningful. This is the group which comprised the "supply" insofar as the demands of the institutions were met. In such a study it is necessary, of course, to rule out completely the teacher who changes from one college teaching position to another. These teachers do not constitute a supply, nor do they satisfy a demand; they do no more than shift the demand from the positions they enter to the positions they vacate. Throughout the following discussion, therefore, the "new" college teacher will be regarded as one who *did not occupy a full-time college or university teaching position the preceding year*.

In a study reported by the NEA Research Division in December 1955,³ the

National Commission on Teacher Education and Professional Standards of the National Education Association, 1950), 23 pages.

³ National Education Association, Research Division, "Teacher Supply and Demand in Degree-Granting Institutions, 1954-55." *Research Bulletin* 34: 4, December 1955, 40 pages.

new full-time teachers employed in 1953-54 and 1954-55 were identified in a representative number of colleges and universities. They were reported separately by teaching field and by type of employing institution. Each new teacher in one of these subgroups was shown to be at one of these four levels of preparation: (1) holder of an earned doctor's degree, (2) had completed one year of graduate work beyond the master's degree, (3) had a master's degree, or (4) had less than a master's degree. The report indicated also the sources from which these new teachers had come.

The intent of that study was to establish a two-year base of information so that subsequent studies, if made biennially in an identical pattern, would reveal trends contributing to a clearer understanding of the college teacher supply-demand problem. The study just completed by the NEA Research Division and reported in November, 1957 is a second step in the cycle.⁴ Within the same framework it presents data concerning the new full-time teachers employed in 1955-56 and 1956-57.

The picture is not encouraging. During the first of the four years studied, 1953-54, no less than 31.4 per cent of the new full-time college teachers inducted into service held the earned doctor's degree. Of those employed the following year 28.4 per cent were at this level of preparation, but of the group employed in 1955-56 only 26.7 per cent had attained doctoral status, and of those employed in 1956-57, only 23.5 per cent had done so.

At the other end of the preparation scale—those not having the master's de-

gree—the picture is even darker. In 1953-54 only 18.2 per cent of the newly employed full-time college teachers entered service without the master's degree, but in 1954-55 it was 19.3 per cent, in 1955-56 it was 20.1 per cent, and last year, no less than 23.1 per cent. Thus in a four-year period the holders of the doctor's degree among newly employed full-time college teachers have decreased 25.2 per cent, and those entering service without the master's degree have increased 26.9 per cent.

These figures take on added meaning, of course, when they are applied to the new teachers entering the various fields of instruction. Some areas have suffered much more than others. Below are listed the principal fields of instruction, with the per cent of doctor's degree holders among the new full-time teachers employed in 1953-54 and in 1956-57:

FIELD OF INSTRUCTION	PER CENT HOLDING DOCTOR'S DEGREE	
	<i>Em- ployed in</i>	<i>Em- ployed in</i>
	1953-54	1956-57
Psychology	68.4	55.3
Biological sciences	54.5	51.2
Physical sciences	53.0	43.7
Social sciences	42.4	33.7
Education	36.5	31.4
Foreign languages	36.3	27.9
Agriculture	34.9	23.8
Mathematics	34.2	20.5
Health sciences	34.2	22.8
English	29.0	17.7
Business and commerce	21.4	8.8
Home economics	21.0	6.0
Engineering	15.9	11.1
Fine arts	12.2	9.8
Physical and health education	10.3	5.0
Total*	31.4	23.5

* Includes seven fields not listed above because small numbers of new teachers were reported.

⁴ National Education Association, Research Division, *Teacher Supply and Demand in Colleges and Universities, 1955-56 and 1956-57*. (Washington, D. C. The Association, 1957), 76 pages.

Another view of recent developments comes to light through the field-by-field employment of new teachers not yet holding the master's degree. Of those employed in 1956-57 to teach engineering, 54.8 per cent were at this modest level of preparation; to teach agriculture, 42.7 per cent; mathematics, 27.0 per cent; business and commerce, 26.9 per cent; home economics, 25.6 per cent; physical sciences, 18.4 per cent. And the reader is reminded that this report is concerned only with *full-time* teachers; persons employed on a part-time basis are completely excluded.

Still another view of the current situation is revealed through the employment practices of the several types of institutions. Here are the per cents at the high and low levels of preparation:

TYPE OF INSTITUTION	PER CENT OF NEW FULL-TIME TEACHERS	
	EMPLOYED IN	
	1956-57 WITH	
	<i>Less than</i> <i>Doctor's</i> <i>Master's</i> <i>Degree</i> <i>Degree</i>	
State universities	24.8	27.8
Nonpublic universities	32.5	19.2
Municipal universities	25.7	24.3
Land-grant colleges	21.1	33.2
State colleges	24.7	13.3
Teachers colleges	15.7	14.9
Nonpublic colleges:		
Over 1,000 enrollment	23.0	22.2
500-999	18.4	19.4
Under 500	19.9	28.4
Total	23.5	23.1

An earlier report⁵ showed that, of the *total* full-time staff in service in 1953-54, as many as 40.5 per cent held the doctor's degree and only 10.4 per cent were below the master's degree level. Nonpublic uni-

versities were high, with 51.9 per cent of all full-time teachers holding the doctor's degree, and teachers colleges were low, with only 29.9 per cent. The 1956-57 employment record indicates a widening of this gap; about one in every three new full-time teachers in the nonpublic universities holds the doctor's degree, while scarcely one in six entering full-time service in teachers colleges does so. Two mitigating factors, however, must be recognized. One is the fact that teachers colleges (along with state colleges) have the smallest per cent of full-time staff members below the master's degree level and employed the smallest per cent in 1956-57. The other is the fact that teachers colleges resort to no more than incidental use of part-time teachers, while the complex institutions of all types make generous use of such persons. Since comparable data on the preparation of part-time teachers are not at hand, the spread in the quality of the total instructional service may not be so wide as would at first appear to be the case.

SOURCES OF NEW TEACHERS

Many, perhaps most, college teachers who are new to their present positions come from similar service in another college or university. The problem under consideration here, however, is not teacher turnover. Thus, *another full-time college teaching position is not a possible source of a new teacher*. Attention here is focused upon individuals who came from outside the full-time corps in service the preceding year.

The limited evidence at hand shows that, while about half of all new teachers are coming directly from the graduate schools, the trend is down—51.5 per cent in 1953-54 and 1954-55, and 45.2 per cent in 1955-56 and 1956-57. But the trend is up in the employment of persons from

⁵ National Education Association, Research Division, "Instructional Staff Practices and Policies in Degree-Granting Institutions, 1953-54," *Research Bulletin*, December 1954, 60 pages.

other kinds of educational service, particularly high school teaching. During the past two years 13.8 per cent of all new full-time college teachers came directly from high school teaching positions. Teachers colleges drew most heavily from this source—37.6 per cent—while one in five new teachers in state colleges and one in six employed by the nonpublic colleges stepped up from high school classrooms. Nonpublic universities, on the other hand, took only 6.6 per cent of their new teachers from this source.

Other types of educational service also contributed. From school administration came 2.7 per cent of the new college teachers; from junior college teaching, 2.6 per cent; from elementary school teaching 1.3 per cent; from other miscellaneous educational services, 4.7 per cent. In total, one of every four new college teachers comes from some other educational work.

Recruits from business occupations increased from 10.4 per cent of all new full-time teachers in 1953-54 and 1954-55 to 13.5 per cent during the two more recent years. All of the complex institutions rank higher than any of the colleges in attracting new teachers from the noneducational occupations.

In every type of institution the shortage of fully qualified candidates is further emphasized by the employment of persons directly from the preceding bachelor's degree class in meaningful numbers.

AVAILABILITY OF NEW DOCTOR'S DEGREE GRADUATES

Of first concern to all employers of college teachers, of course, is the availability of candidates with comprehensive preparation—holders of the doctor's degree. While possession of this degree does not bespeak the competent college

teacher per se, and while many excellent teachers have not attained doctoral status, the unavoidable fact remains that the quality of an entire faculty is judged by the extent of each staff member's formal preparation. This is the one single criterion at hand for immediate and easy application. It is to be expected, then, that employing officials would rank the possession of a doctor's degree high on the list of desirable qualifications.

But what is happening occupationally to the persons earning this degree? The number to graduate at the doctorate level has risen steadily, from the low of 2,000 in 1946 to the substantial number of almost 9,000 in 1954.⁶ On the surface it would seem that this annual production would go far toward meeting the needs of all institutions of higher education. The two-way catch, of course, is that (1) other occupations are rapidly stepping up their demands for comprehensively trained personnel, and (2) the doctor's degree graduates entering college instructional service are not distributed among the teaching fields according to the need for them.

The current situation is shown in the figure on page 154. Of those receiving the doctor's degree in 1955 and 1956, about two of every five are already fully engaged in occupations in which they continue at work. True, a good many of these are serving as college teachers, but their graduation does not add to the reservoir of new supply; they are already consumed, occupationally speaking.

Thus a year's gross production of doc-

⁶ This annual increase was interrupted by a slight drop in 1955, but the increase was resumed in 1956, to just over 9,000 for the first time. This is in contrast to a three-year decline (1951 to 1954) in the number of master's degrees granted, and a five-year decline (1950-1955) in the number of bachelor's degrees granted.

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Acas. No.

total graduates is reduced from 9,000 to fewer than 6,000 actually available. But here again the two-in every-five formula is in operation. Only about 3,500 enter educational service, while other occupations, with attractive salary offers, claim the remaining 2,500. College teaching, of course, claims most of those entering educational work, but some enter the employ of school systems, while others go into administration, and still others enter the service of educational agencies and associations.

Even yet, however, the handicaps of the college employing official are not shown in full. In some fields, although the number of graduates is considerable, industry all but robs the teaching profession. The extreme case is chemistry, the field in which the greatest number of doctor's degrees are granted annually. Of the total, only about one in eight is already fully employed; most of them are in full-time study right up to the date of graduation. At that moment, however, all kinds of educational service, *including college teaching, can do no better than*

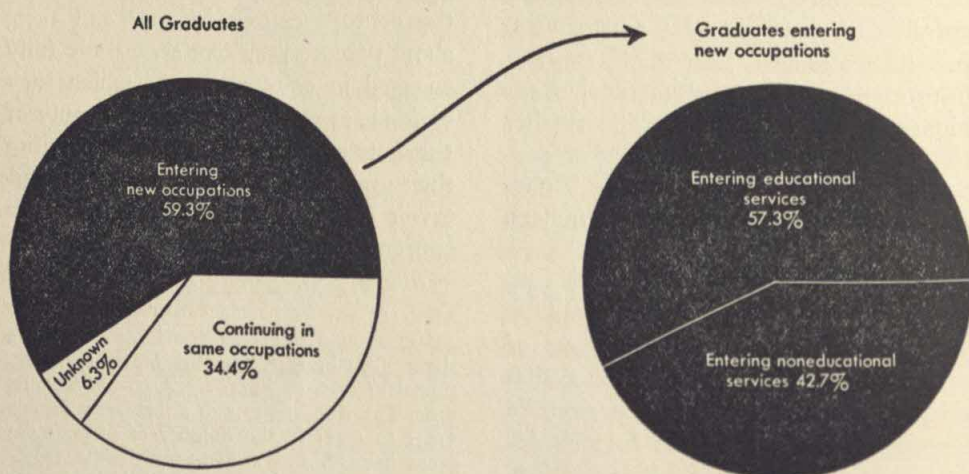
to capture one in four of these emerging graduates in chemistry.

The situation is almost as bad in physics; seven of eight are available at the time of graduation, but three of every five enter a noneducational occupation. In mathematics three of four are available when the degree is conferred and about two of every three enter educational service. Small wonder that the higher educational institutions have difficulty in producing the number of scientists and engineers needed in America today!

TWO CLASSES OF INSTITUTIONS

Even yet, the dilemma of the college employing officer is not told in full. On some one hundred university campuses, with graduate students immediately at hand, recruitment of future college teachers can be conducted on a person-to-person basis. Good prospects can be identified early; interest in teaching can be stimulated; challenging tryout experiences can be provided; employment at graduation can become a matter of mutual understanding. Only a precaution against

OCCUPATIONS OF DOCTOR'S DEGREE GRADUATES OF 1954-55 AND 1955-56*



* Based on reports from 117 of 146 institutions granting this degree.

excessive inbreeding of the staff can limit the advantage of the institution which is itself the producer of the new supply. And even so, informal trading with similarly advantaged institutions is not too difficult.

But what of the one thousand-odd colleges (and, of course, some five hundred junior colleges) which do not themselves produce graduates with the doctor's degree or even with the master's degree? Are they to be pushed toward the status of second-class institutions? Is a sharper division of the higher educational institutions on the basis of quality of instructional staffs in the offing? Will we, in the next decade, see a concentration of the comprehensively prepared instructional personnel in a relatively few institutions, with a vast majority of the others condemned to steady deterioration in the scholarship of their staffs?

The evidence is strong that this tragedy is already upon us. The NEA Research Division report is based on information submitted by 829 of 1,017 colleges and universities constituting the core of higher education in the nation. The reporting institutions employ 99,174 full-time and 39,119 part-time teachers and enroll 1,362,391 full-time and 443,491 part-time students. That these reporting institutions are fully representative of the higher education structure in America can hardly be denied.

The number of teachers new to their positions in these institutions is not known. It is likely that in some cases a majority of those joining a staff last year came from the staffs of other colleges. Such promotional opportunities are, of

course, one of the attractions of the teaching profession and are to be encouraged. But these 829 reporting institutions assumed the responsibility for inducting into full-time teaching service 6,337 "new" teachers in 1955-56 and 8,308 in 1956-57. These 14,645 came from outside the total corps of teachers in service the preceding year. Of the group inducted into service in 1955-56, exactly 26.7 per cent held the earned doctor's degree; 17.8 per cent were one year beyond the master's degree; 35.4 per cent held the master's degree; 20.1 per cent were below the master's degree level. Just one year later these per cents were 23.5, 18.1, 35.3, and 23.1.

Four years ago, of the total staff in service, 40.5 per cent held the doctor's degree and only 10.4 per cent were below the master's degree. But among the new group inducted last year fewer than one-fourth are at the top and almost one-fourth are at the bottom of this four-step preparation scale. And yet, among the 829 reporting institutions, one great university employed 81 new teachers and another employed 62 new teachers during the past two years and *every one of these 143 new teachers held the doctor's degree!*

Will this concentration of the most comprehensively prepared teachers in a few institutions go on at a continuously accelerating pace? If so, what are the implications for the future? Are we, indeed, on the threshold of an era in which a second-class education will be the lot of that vast group of young men and women soon to crowd the campuses of the nation?

University Extension Centers in Higher Education*

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FOR about seventy-five years universities have made serious efforts to meet the needs of off-campus persons for higher education. One of the consequences has been the establishment of extension centers. These are defined here as off-campus locations at which universities provide physical facilities, some full-time personnel, and selected educational programs for persons not utilizing campus resources.

The demand for extension-center services has reached a new high. In 1952, twenty-two universities were found to be operating ninety-four centers serving about 200,000 persons. In 1956, thirty universities in twenty-seven states were operating 139 centers serving about 300,000 persons. Since centers have grown fastest during times of educational stress, they probably will continue to increase in importance during the next few years as they are used to relieve enrollment pressures on parent institutions.

LOWER-DIVISION EDUCATION

A large part of the uncertainty concerning the role of extension centers revolves about their responsibility for serv-

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ices of the junior-college type. It is here that differentiation among functions of the various types of educational institutions is most difficult. While upper-division study is of interest mainly to colleges and universities, lower-division study is of concern not only to degree-granting institutions but also to public school systems, for it is here that higher education meets the continuing upward movement of public education.

Traditionally, higher education has differed in several important respects from public-school education, and these differences seem to lie at the heart of the controversy concerning education at the junior-college level. The public schools are open to everyone, and compulsory attendance laws are imposed on all youth of public-school age. Higher institutions, on the other hand, are generally selective, and of course compulsory attendance laws do not apply to their clientele. Public schools are controlled and operated by local boards and are financed by local and state funds, while public higher institutions usually are controlled and operated by state-wide boards and are financed by state funds. Pupils attending public schools live at home, while students attending higher institutions usually live away from home. The public schools are

geared to local conditions, while higher institutions are geared to state-wide conditions.

Most educational planners contend that education during the two years immediately following high school should be made available to everyone able to profit from it. For this to be accomplished, they contend, education must be provided within commuting distance of potential users, it must be essentially free, and it must consist of a variety of programs to meet specific needs. They maintain that the public-school system satisfies these criteria much more completely than higher institutions and therefore should assume primary responsibility for education at the junior-college level.

Whatever the validity of these contentions may be, it should be recognized that the level of public education is continually rising and that more services must be provided on the junior-college level. During the past century the minimum educational terminal point accepted by the public has risen slowly from the end of the eighth grade of school to the end of the twelfth grade. At present there is widespread demand that the minimum terminal point be raised to the end of the fourteenth year. The time schedule suggested by past educational developments indicates that each upward extension of the public-school system has required a span of fifty to sixty years to come within reach of all persons for whom it has been designed. If this trend continues, free post-high-school education through the fourteenth year for all persons able to profit from it will become a reality well before the end of the present century, and probably during the next twenty-five years.

Whatever the future developments in education may be, it is fairly certain that education during the two years immedi-

ately after high school will continue to be provided by lower-division campus programs, by an upward extension of the public school system, and by university off-campus programs. Although colleges, universities, and extension centers now appear to be serving about three-fourths of all persons at the lower-division level, local community colleges will assume constantly increasing responsibility for these services during the years ahead. This means that present emphasis by centers on lower-division programs will slowly decrease. Until adequate systems of community colleges are developed, however, universities will continue to provide extensive lower-division programs both on main campuses and in off-campus divisions. Lower-division programs will comprise only a part of center offerings, but for a time, as at present, they will comprise the major part. When universities endeavor to fulfill the junior-college function, they should provide programs that are sensitive to local conditions, that are within the financial means of as many potential users as possible, and that include terminal as well as regular lower-division studies.

The directions specific universities will take will be determined largely by their past educational experiences and by the educational environments in which they exist. Institutions operating centers in states having few junior colleges probably will expand their center programs at the lower-division level, while those in states with numerous junior colleges either will have few extension centers or will have centers involved primarily with other responsibilities. This means that institutions such as the University of Indiana, Pennsylvania State University, the University of Wisconsin, and the University of Alabama will continue for some time to offer extensive lower-division

programs, while institutions such as the University of Texas, the University of Mississippi, and the University of Florida will have very limited extension-center facilities. Other institutions, such as the University of California and the University of Michigan, will continue to operate off-campus centers, even though numerous junior colleges surround them; but their center services will supplement rather than compete with junior-college programs and will be concentrated mainly on the upper-division and graduate levels.

UPPER-DIVISION EDUCATION

The shift from lower-division studies to higher studies already is taking place. In 1951-52, about 35 per cent of all center courses offered were above the freshman-sophomore level. The University of Tennessee offered nearly two-thirds, the University of Oregon, the University of California, and the University of Mississippi about one-third, and Indiana University about one-fourth of their courses in the upper division. The trend toward upper-division studies was even more evident in a recent announcement from the University of California listing 86 per cent of a total of 187 offerings in the upper division.

At the upper-division level, there is the usual shift of emphasis from liberal arts courses to professional courses. Only 22 per cent of lower-division courses are utilitarian, as against 63 per cent of upper-division courses. Demand is heaviest for courses in business administration, education, and engineering. Since the motivations of about 80 per cent of center enrollees are said to have an occupational basis, centers are placed under a distinct handicap when their programs are restricted to the lower-division level.

The heavy demand of extension-center clientele for professional and semiprofes-

sional services, however, should not blind center personnel to their responsibility for the maintenance of a proper balance between liberal education and utilitarian education. Many of the values of a liberal education seem to attain their highest significance among adults. Personnel of exceptional understanding and skill must be placed in centers if the balance between liberal and utilitarian education is to be maintained.

As the level of study rises, the problem of financial support changes. Centers that attempt to fulfill the junior-college function will find that high fees are more of a barrier to young persons just out of high school than to older persons with substantial incomes and years of employment experience. If centers are to serve this large group of young people, income other than from student fees must be provided. It is quite probable that only centers proposing to fulfill the junior-college function will receive significant public financial support in the foreseeable future. By adjusting their programs to the needs of young people, the centers of the University of Wisconsin and the University of Wyoming already have made considerable headway in obtaining public assistance.

At the upper-division level, some of the special possibilities of extension centers begin to appear. Centers can provide a wide variety of upper-division services for people not reached by campus programs or by community colleges. Nearness to the homes of students is said to be one of the unique features of community colleges; but proximity is equally an asset of extension centers in their operations on a higher level.

GRADUATE STUDY

Extension centers also provide a significant amount of graduate study. In

March, 1956, eighteen of twenty institutions surveyed reported provisions for graduate study in extension centers. Three offered six to seven hours, five offered twelve hours, five offered fifteen to sixteen hours, two offered thirty hours, and three reported no limit on graduate study. This means that fifteen of the twenty permitted half or more of graduate requirements to be satisfied in off-campus centers.

A few institutions permit practically all requirements for the master's degree to be satisfied in off-campus centers. The University of California, for example, offers complete programs in four localities. The University of Michigan offers graduate work with residence credit in Detroit, Grand Rapids, Flint, Saginaw, and Battle Creek and graduate work with extension credit in Escanaba and Traverse City. A complete program in engineering mechanics leading to a master's degree was initiated in Detroit in 1950, and at present a complete program in business administration is being offered.

The entry of large numbers of highly trained persons into business, industry, and government and the establishment of extensive non-university research facilities will continue to provide resources for advanced study in off-campus centers. In 1953, the total cost of scientific research and development was \$5.4 billion. Of this amount, the national government provided \$2.8 billion, or 51.9 per cent; industry provided \$2.4 billion, or 44.4 per cent; education provided \$130 million, or 2.4 per cent, and other sources provided \$70 million, or 1.3 per cent. Such a situation would seem to be conducive to the establishment of joint advanced programs between educational and noneducational institutions in off-campus as well as campus localities.

RESEARCH

If extension centers are to encounter increasing demands for graduate study in the years ahead, they also will find themselves devoting additional time to ways of making the results of research more useful to larger numbers of people. The enormous impact of the results of research on everyday living accounts for the competition in business and industry for research personnel and practically compels extension centers to accept the diffusion of the results of research as one of their primary functions.

The role of the subject-matter specialist in the Cooperative Extension Service should be examined closely by administrators in general extension. The purpose of the Service is to help rural people use the results of research coming from the agricultural colleges and experiment stations. Subject-matter specialists are employed in such fields as marketing, animal husbandry, dairying, poultry, clothing, and canning. Their duties are to keep informed of research in their respective fields and to interpret the results in simple terms to county agents and to the farm population.

Although extension centers now employ numerous full-time subject-matter specialists, few fill the role of the specialist in agricultural extension. While the primary duty of subject-matter specialists in agricultural extension is to make the results of research more useful to farm people, the primary duty of these specialists in extension centers is to do classroom teaching. This difference of emphasis is not caused by lack of understanding on the part of extension-center personnel. Most would agree that the contributions of specialists in labor relations or mental health might be as valuable as those of specialists in canning or

poultry. The difference results instead from the fact that off-campus centers must derive practically all of their income from their programs. As yet, general-extension personnel have not been able to make their distributive, explanatory, and popularizing services as remunerative as regular classroom teaching. Until public funds are provided, little change can be expected in the efforts of centers to make the results of research more useful to larger numbers of people.

Pending arrival of Utopian conditions under which public funds are provided, extension centers probably will employ three main approaches in their efforts to diffuse the results of research. The first would be to develop more short courses, conferences, and institutes built around problems in which significant research has been done and in which specific groups are interested. The second, closely related to the first, would be to make wider use of faculty members who are competent not only in teaching but also in research. The third would be to devise ways and means for subject-matter specialists on center faculties to devote more time and effort to the task of distributing, explaining, and popularizing the results of research and less to classroom teaching.

If as much effort, time, financial support, and sympathetic understanding were devoted to general extension during the next forty years as have been devoted to agricultural extension during the past forty, improvement in the quality of living among urban people probably would be as significant as that attained in recent years among farm people. Since the nation is in a process of slow transition from rural to urban and from agricultural to nonagricultural status, it seems reasonable to assume that in time increasing emphasis will be placed on making

the results of research useful to urban people. In the long run, this could become one of the chief responsibilities of extension centers.

COMMUNITY DEVELOPMENT

Extension centers also have responsibilities for community improvement. In the past, center activities have been designed mainly for individuals and special groups, but increasing attention is being devoted to matters of community-wide interest. The approach to education through community improvement is based on the assumption that environment affects the development of the individual and that education can be a significant factor in the control of environment, rather than merely a response to change and an aid in adjusting to change.

A number of factors will determine the degree of success attained by extension centers in working with groups on community problems, but three seem to be of special importance. The first is that groups with which centers work must be approached on their own levels and in terms of their recognized interests. The second is that all community resources should be utilized. Community group structure consists not only of easily recognized formal groups but also of numerous informal groups that are indistinguishable except to the skilled observer. Extension centers have had reasonable success with formal groups, but they have had little experience in working with those that are loosely organized and held together mainly by the attraction of personal association. The third is that, as highly organized as communities are, they suffer from a basic weakness growing out of the failure of the majority of people to participate effectively in public affairs. If centers are to attain maximum effec-

tiveness as instruments of community development, they must devise means of working with all elements in the community group structure and of increasing the extent and quality of citizen participation.

The special role of extension centers in community improvement grows out of their intimate relationship with their local communities and out of their access to a wide range of university resources. Centers should exploit their intimate community connections to the end that they may assist individuals and groups to recognize their community needs, analyze their resources, plan for action, and evaluate results. At the same time, they should bring a variety of pertinent university resources to bear on community problems. Because of their identification with universities, this should be easy to achieve. Moreover, center personnel usually are skilled in cutting across departmental lines to obtain particular types and combinations of assistance needed in the solution of community problems. University assistance usually will take the form of factual and procedural information and training in problem-solving processes and techniques.

In the years ahead the focus of attention in extension centers will shift gradually from the individual to the group and to the community, or, more accurately, will be enlarged to place increased emphasis on all three. One result will be a growing concern among center personnel for programs that provide not only knowledge but also action plans for community betterment. Such an enlargement of emphasis will call for center employees with special skills and understanding that few now possess. A beginning has been made with the larger, more easily recognizable community organizations, but effective programs for informal groups and total communities must be developed.

COORDINATION AND CREATION

Extension centers also have a coordinating and creative responsibility. While campus personnel have the final responsibility for academic standards and course content, extension personnel have the responsibility for determining community educational needs and for creating effective situations in which local persons are able and willing to utilize university services. This responsibility often involves the creation of entirely new resources or the adaptation of campus resources to off-campus needs. In order that centers may be more than collections of departmental fragments from parent institutions, extension personnel are responsible for the organization, development, and operation of reasonably well-rounded off-campus programs with an identity of their own. These considerations represent the specific areas in which extension centers have special contributions to make to their parent institutions. The capacities required for the performance of these functions are as distinct and essential to the extension of university resources as are the subject-matter competencies of campus instructional personnel. Failure either of center personnel or of campus personnel to understand and to accept this basic working relationship results in limited off-campus use of university resources.

SPECIAL ROLE OF EXTENSION CENTERS

This enumeration of extension-center activities indicates that centers are engaged in a variety of important educational pursuits but it does not indicate what services, if any, they can provide better than any other type of educational institution. Centers offer extensive programs of the community-college type,

but there is little evidence that they can provide such services more effectively than community colleges. Centers also offer programs of advanced study and of community development, and they are interested in distributing, explaining, and popularizing research; but again there is little evidence that they can provide these services more effectively than state colleges or other degree-granting institutions.

But extension centers do have a special responsibility in higher education. That responsibility arises from the fact that even though programs of community colleges, state colleges, and other higher institutions are just as effective as off-campus programs of universities, they never meet the total need for education. A gap always exists between the amount and kinds of education needed and the amount and kinds provided. There is an average span of about fifty years between the time an educational need is recognized and the time a prototype is created to meet the need. Moreover, the introduction of the prototype usually is followed by about fifteen years of experimental testing and about thirty-five years of diffusion. The average educational system at the mid-point lags about twenty-five years behind the best practice. Since many universities have state-wide responsibilities, they frequently accept as one of

their major tasks the reduction of the gap between needed off-campus education and that which is provided, insofar as their basic aims and resources permit.

The special role of extension centers, therefore, might well be to minimize the shifting gap between education that is needed and education that is provided by existing facilities. The gap between needs and available resources exists at all levels, but at present it probably is narrowest at the elementary and high-school levels and widest at the community-college level. It is not only conceivable but also quite probable that fifty years hence the widest gap will have shifted from the lower-division level to a higher level. Because of their connections with universities having state-wide responsibilities, because of their ability to provide selected services of practically all types and levels, and because of their easy adaptability to changing conditions, extension centers are particularly well-suited to this important educational task. By providing as many needed services as the purposes and resources of their parent institutions permit, and at the same time by providing encouragement to the upward movement of the public school system in every way consistent with the public interest, extension centers will play a useful, dignified, and continuing role in higher education.

Social Class in the High School Curriculum*

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TEACHING about social class may become increasingly common in American high school curricula.¹ Articles dealing with the impact of social status on education are numerous. It is of interest that a carefully designed outline for a unit on social class was published some years ago.²

However, the moral and prudential arguments offered in support of this development contain serious logical flaws. Furthermore, a decision about curricula must be guided in major degree by substantive evidence as well as other criteria; the practicability of the proposal must be judged in the light of the availability of valid teaching materials suitable for presentation to immature pupils.³

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¹ The growing number of dissertations dealing with class and more recently with "the power structure" as these affect local school systems raises basic questions about graduate instruction also. Advisers of graduate students in education might wisely await more consensus within sociology about stratification before borrowing immature notions as bases for educational research.

² A. Frazier, "Shall We Teach the Status System?" *School Review*, 55:93-98, 1947.

³ The balance of professional sociological judgment about our stratification system is quite different today from what it was even ten years ago. Textbooks and lower-school curricula are likely to be based on obsolete theory in so rapidly changing an area.

THE AFFIRMATIVE CASE

Perhaps the firmest basis for the proposed innovation in high school curricula lies in the undeniable importance of social status in American society and in the obvious effects on the individual's life of his place in society. It is an obligation of the schools, proponents would say, to orient children by giving them an understanding of this central feature of their society.

Since knowledge should be functional, youth ought to be assisted to adjust realistically to our social order. It is assumed that formal exposition of the nature of the class system will facilitate that adjustment. Such study, some would say, will inoculate children against shock when they meet the more oppressive features of status in their later careers.

A few advocates would try to give youth a conscious skill in manipulating the class system, thereby, it is assumed, helping them in advancing their careers. At a minimum, they will learn how useful education can be in aiding upward mobility.

Finally, there are educators who wish to use the schools for transforming society and who believe that an awareness among youth of the nature of the class system might expedite this change. They hold that in this way a new generation would be motivated to eliminate the crasser features of the status system.

There are other, less central arguments. Materials about social class are dramatic and "realistic." This topic can be used as the theme for investigation of the children's own community. For some teachers the new topic will provide, for the first time, a coherent structure around which to organize social studies courses.

LOGICAL MERITS OF PROPOSAL

Even before considering the substantive materials available for teaching units on social stratification one may examine the logic of the position—recognizing, however, that logical validity cannot be the determining factor in what is inescapably a moral decision.

It is clear that secondary schools can hardly undertake to offer systematic instruction about every important element in our society. Lack of time, refractoriness of the materials, or an ill-prepared teaching corps may necessitate omission of many important topics except in a few schools.

Unfortunately, realistic adjustment of youth to life is not necessarily fostered by classroom instruction. The devotion of teaching time to creating awareness of social conditions is little assurance of individual adjustment to society. Are textbook lessons in physiology more likely to produce hygienic living or hypochondria?

A truly awkward difficulty lies in the failure of the various arguments regarding adjustment to run in the same direction. To cushion children against shock when they become aware of how the status system presses upon them does not call for the same classroom approach as teaching them to utilize the status practices for private advancement. Furthermore, neither of these sorts of adaptation fits very well with the goal of diminishing class distinctions.

In the last analysis, one's judgment as to the optimum adjustment to the status system depends upon what one assumes the nature of that system to be. The prudential judgment presupposes, though it is not bound by, decisions as to the "facts" of stratification and the suitability of the subject-matter materials. Are the facts well enough known to assure us that we will not be teaching primarily things that are not so? This is a major problem with many facets, and may be a decisive factor in policy decisions.

BALANCE OF PRUDENTIAL JUDGMENTS

A practical decision about curriculum obviously is governed by the level of schooling under consideration. In the senior college one assumes stress will lie mainly upon knowledge, with minor attention to value judgments. At the secondary or lower levels emphasis may well be upon values and utility in daily life, with less attention to facts. The junior college falls midway.

Availability of teachers capable of handling the new teaching units could be a decisive consideration. It happens that the bulk of reliable literature about social class has been published in recent years and in specialized technical journals. Few teachers have had the opportunity to read this material; presentations in introductory sociology texts are often remote from research findings. Much of this material must be translated into lay language. This obstacle is less important in established disciplines that have been core subjects in teacher training. Anyone who endeavors to put some of the research reports on stratification into plain language can grasp this problem,⁴ but he

⁴ Critical readers discover that much of the most readable and most often quoted material on this topic is ambiguous.

must be blessed with both knowledge and wisdom to discourse about stratification to adults. The lamentable state of secondary school work in economics and sociology should make us pause before undertaking to deal with one of the most recondite combinations of data from both these fields.

In teaching precollege students about so complex a subject gross simplification is unavoidable. But what kind of simplification? Assuming that classroom discussion has any real impact on attitudes and beliefs, it can matter greatly which of the following procedures we adopt. We can focus upon "classes" when dealing with topics where status is relevant, even going so far as to organize a course around class and status concepts—introducing as a modification recognition of the fact that class lines are not rigid. Alternatively, we can teach pupils that our society offers great opportunities for capable and ambitious people, but that in even the most democratic societies there are many injustices and discriminations. The personal attitudes of teachers are likely to outweigh the complicated evidence in determining the pedagogical orientation. Moreover, at the secondary level, there are no "mere facts" about social class. Outside the scholarly domain people talk about social class because they want to do something about it, and their "facts" are enmeshed in programmatic valuations. Given the complexity and the emotional nature of the topic, one or another stereotype is almost unavoidable. Whatever the approach, attempts to teach a necessarily simplified version of the status system may give children a more naive idea about our society than they would get from folklore and cumulative direct experience.

Shall we teach about "social class" or about "social life in America" with inci-

dental allusion to stratification? It is one thing for youth to learn in a social problems course that incomes are not equally distributed, or that the quality of housing is limited by family income, or that few laborers sit in the legislature. It is something else to reiterate, section by section through a long teaching unit, that those features of our life are effects of "social class position." Such status features as may relate to a particular topic can be handled frankly. To put the label "social class" on a cluster of advantages or handicaps creates quite a different conception—a stereotype. We may be having some success in eliminating ethnic stereotypes from children's minds, but are we merely replacing them with class stereotypes? Labels such as "upper class" can become just as explosive as "nigger." Most individuals doubtless would find it easier to adjust to low incomes or restricted opportunities if they did not feel that they were members of "the lower class."

We might take warning from other exaggerated emphases in our society. We have made a fetish of female beauty in schools as in the movies. What effects does this obsession have upon marriages and upon the girls who are not beautiful, or upon the boys who can never compete for the beautiful girls? How much benefit is recreation deriving from commercialization of school sports? How much sportsmanship are we teaching? Even with regard to sex education, it may be that courses in mental hygiene, household operation, or even etiquette would prove more beneficial.

Coming closer to the heart of the question, we may ask, Should children be made self-conscious about social class? (And one must use "should" in this query, since we are dealing with value choices, and highly controversial ones.) What ends will this serve? After all, the

majority of children will live out their lives in the lower sections of the status hierarchy. What is the help to them to hear, item by item, the innumerable disadvantages they will experience? Perhaps illusions (to the extent that illusions are actually involved) will be more conducive to contentment both for those who "stay put" and for those who rise. It requires no school course to inform the ordinary child (or his parents) that to climb takes more drive and more work than to stay at the top when you were born there.

Let us pursue this scheme somewhat further. Much of the incentive for proposing the new teaching topic arises, one infers, from the beliefs that (a) social class is a predominantly dysfunctional feature of society, and (b) if one or two generations can be trained away from snobbishness, our customs of stratification will wither. Postponing the question of the possible harmfulness of status distinctions, we may look at the second half of the proposition. It is axiomatic that most children learn more from the actions and attitudes of people around them than from verbal commentaries upon life.⁵ Perhaps the greatest contribution of the schools would be to set an example by minimizing status distinctions and hence class awareness. But suppose for a moment that children do apply theoretical stereotypes and that these include the conceptualization of "classes" as hard realities. They must then identify their own positions. Are they themselves categorically treated in terms of some social class identification? To ask this question is to look for evidence of unfairness or discrimination, and in so doing perhaps to find rationalizations of failures that are

in fact personal, and thereby to cultivate resentments. To talk openly about social class may encourage the fortunate to grasp all possible prerogatives as their due (regardless of the teacher's ideology), while impelling others to project their resentments even more bitterly upon the whole society. History teaching has not weakened nationalism nor has greater understanding of sex diminished illicit conduct or improved the status of women. Will the teaching of class-status concepts contribute to the melting away of classes, or will it sharpen class identifications, restrictive techniques among the privileged, and rebellious negativism among others?

Clearly we are dealing here with a self-realizing prediction. It may be "better" for people to believe that failure is the result of bad luck and lack of ambition rather than the result of the system. Perhaps the first description is actually a more accurate picture of our society. Perhaps the status system makes more positive contributions to the functioning of the total society than we acknowledge. We may need the Benthamite incentive to operate a complex society.

It is becoming conventional to assert that the ideology affirming America to be a classless society is a myth—which of course it is. But pragmatically, has belief in this myth been deleterious? The ideal of striving toward equal opportunity rather than emphasis upon status equality may be necessary if the schools are to raise measurably the cultural level of disadvantaged groups. And so once more we may ask the prudential question, Should children be encouraged to accept an assumption of fuzzy class lines and status fluidity, or should they learn to identify their fellows in class terms? Discrimination, exploitation, and cruelty come so easily to human beings that one

⁵ British experience of the last generation suggests that heavy taxation may break down class lines sooner than any formal teaching.

may well hesitate to arm people with neat categories by which to rationalize their prejudices. Such stereotyping can hardly be avoided if teaching is organized around the concepts of social class. Indeed, how mythical this faith is remains open to debate. To repeat, our assumptions about the nature of the class system, its causes, and how it operates must influence our expectations about the results of focusing school instruction upon that system.

NATURE OF THE AMERICAN CLASS SYSTEM

Even readers who find the foregoing objections to teaching "the facts" about stratification to be unconvincing must discover what those facts are. As yet we know very little about this central part of our social structure, and professional consensus is emerging very slowly. Ironically, where consensus exists, these facts are quite familiar to children. As knowledge accumulates, our picture of the status system is becoming more complex. But curriculum planners and writers of high school textbooks will find it difficult to keep in touch with the most recent work and will be tempted to rely upon popularizations which have little relation to the current state of theory and research.

This is not the place for a miniature treatise on stratification. Instead we hazard some judgments about conclusions that are likely to crystallize from ongoing research, together with a few basic points of logic and theory. If these tentative conclusions are supported, the task of designing a teaching unit on social status will prove elusive.

It may be helpful to begin by emphasizing the multiplicity of forms or aspects of status inequality. There has possibly been too much discussion about the sin-

gle aspect of stratification summed up in the labels upper-upper, lower-lower, and so forth. It is these rubrics especially that suffer from unreliability in contrast to more objective indices. It would appear, moreover, that the correlation between the objective indexes and these subjective ones is rather low. The very fact that inequalities are multiple and imperfectly correlated has great importance, for such a state of affairs implies not a more rigid but a less rigid status system. The more criteria we must use to classify a set of people adequately with respect to status, the less weight we may put on any one of these criteria.

It follows that until we know the pattern of inequality in each of these aspects of status *and* the pattern of relationships among these facets, we have little foundation for speaking of social class. The very concept of social class presupposes a congruence and a *high* correlation among many forms of inequality.

In the special case of the United States the situation is complicated further by the intrusion of status factors only incidentally related to class. There are strong regional differentiations, religious cleavages, ethnic differences, and the special problems of Negroes and Spanish-Americans. The association among these four criteria of status and the particular criterion of class is to a large extent historical and certainly very fluid.

But even setting aside these splits in American society, status differences are manifest and marked in each aspect of life. Within each regional, religious, ethnic, or racial group families are diverse in amount and type and stability of income as well as in amount and form and "age" of wealth. There are enormous inequalities of schooling, quantitatively and qualitatively. Occupational position and material possessions are no less di-

verse. Then there are differences in social participation and "culture," not to mention health, personality, and other traits.⁶

In discoursing upon these varieties of inequality, people are prone to use indefinite language. We speak of class differences in educational opportunity, but are such differences greater or less than differences of income?⁷ Are income differentials wider than records in sports or the number of dates garnered by coeds during a year? Instead of collapsing everything into the portmanteau concept "social class" we need to measure specific inequalities. Only then can we compare them and ascertain their intercorrelations. When we become accustomed to thinking quantitatively about these differentials we can then appreciate the importance of asking, Are differences within classes larger or smaller than differences between classes?

It is no less important that we obtain some definite indications of trends in these several aspects of inequality. Ten years ago there seems to have been virtual unanimity that vertical mobility was diminishing in this country; today there appears to be an emerging consensus that mobility is not diminishing. But what we need is definite information about particular kinds of mobility. It is equally essential that we reach some conclusion

about the changing relationships among various aspects of status. Is education more or less closely correlated with income today than formerly? Does education or income show the most marked trend relation with infant mortality?

In moving from separate status elements to the integrative concept of social class one must take certain logical steps. As a minimum, one should not speak of social class—though it is permissible to speak of stratification—unless the separate indexes of status are highly correlated. In fact, it is rare to find correlations above .5—rather poor betting odds. If we know a family's place on one scale of status we should be able to predict closely its position on other scales. But this is only a necessary step, hardly sufficient evidence. Everyone knows that individuals with high incomes exert more than average political influence and send their children to elite schools. We must, however, go further and show that these correlations are stable over time, otherwise we have only "a game of musical chairs." Knowing a family's relative income in 1920, what can one predict about the grandchildren's status in 1980? Where are the sons of the governors and cabinet members of 1914? But we must ask also, What were the incomes of the fathers of men who today enjoy fortunes or high office?

We cannot yet answer most of these questions. We obtain an illusory impression of definiteness and rigidity of status when we take a snapshot of a community. This definiteness disappears when we look at trends. Communities seem to be stable while the national society appears to be fluid, which is impossible.

If we speak of the cultural standards of parents or about the motivation of children toward success we touch upon the phenomenon of exclusiveness. Many

⁶ A curious equivocation in attitudes about status deserves mention. We encourage rigid and impersonal—sometimes even brutal and dishonest—standards in sports and hobbies. No one begrudges the athlete his trophies and no one suggests grading sports affairs to avoid invidious judgments. Inequalities in income are less approved, though no one has shown that the athlete deserves his awards any more than the man with a high income. See Dean A. Worcester, Jr., and Robert J. Lampman, "Income, Ability, and Size of Family in the United States," *Journal of Political Economy*, 58:436-42, 1950.

⁷ See C. Arnold Anderson, "Inequalities in Schooling in the South," *American Journal of Sociology*, 60:547-61, 1955, especially 557-60.

regard snobbishness, especially as it guides the formation of cliques, as the most subtle aspect of class. But one would hardly expect parents to encourage their offspring to imitate "lower" standards.⁸ We really need to give some systematic attention to the positive functions of snobbishness as a protector of standards and a stimulant to ambition. Having moved beyond the first step of showing that social status influences educational attainment, we are discovering that the cultural quality of a home is at least as powerful as its economic standing in this regard. Furthermore, we must keep in mind that no social class holds a convention to decide which children to allow in school or which students in a university. The same parents who expect teachers to favor their children set up college scholarships that are won by children from other social classes.

Clearly, then, if social classes are not merely arbitrary lines on statistical charts we have to find out what their functions are. What do big business executives do to and for society? How does one balance the technical contributions of artisans with their discrimination against the less skilled? Such questions are more fundamental than the dining customs in Petuniaville.

One can gain considerable insight also by attempting to trace relations between the great institutional systems and our status system. One can balance the driving force of the Protestant ethic against the narcotic effects of some other doc-

trines. Church members may not welcome the unwashed into their congregation, yet church-sponsored colleges have aided the children of these rejected parishioners to rise in American society. In the political sphere one can ask whether a sane foreign trade policy is more likely to be sponsored by high-income corporation executives or by farm organizations. Are the real needs and the wishes of the masses ignored to a greater extent by legislatures today than formerly? How did it happen that the masses won the opportunity to exert pressure via the vote? How can we explain the fact that the upper classes provide more vigorous support for civil rights? If upper-upper men rule each "Yankee City," how did we happen to obtain a New Deal? Then there is the problem of reconciling the community studies of stratification with the fact that leadership in big business today is less inbred, class-wise, than formerly. It is necessary to come to terms with the abstruse economic analysis which suggests that monopoly is not an increasing tendency in our economy. We must find some means of relating the diminishing inequality of income or wealth with the reports of shifts in the skill hierarchy and dolorous conclusions about upper-class dominance of our communities.

Inconsistency between widely accepted views about stratification and the hard facts is no less conspicuous in the field of education. It is easy to show that school boards and trustees are mainly well-placed men. But, as Charters pointed out,⁹ it is not so easy to demonstrate that these men have seriously distorted the development of our school system. We are the most unabashedly "free enterprise" and businessman-oriented society

⁸ Much of the worry about the middle-class character of the teachers of lower-class students seems misplaced. Certainly, teachers should know the cultural background of their pupils, and pupils should be taught empathy. But our society cannot be run with the mores of the lower classes; the schools must reorient lower-class children, along with children of ethnic groups, if they are to be able to participate in the society.

⁹ W. W. Charters Jr., "Social Class Analysis and the Control of Public Education," *Harvard Educational Review*, 23:268-83, 1953.

on earth, yet schooling is more equally distributed than income. It would be difficult to show that the sparsity of educational funds reflects upper-class opposition more than lower-class indifference. There are many caste-like features of our racial situation, yet Negroes in southern cities have more schooling than do white people on southern farms. Academic freedom is more assured in colleges run by millionaire boards than in those closely responsive to public opinion.

Americans are really more interested in the chances for their children to move upward than in whether there are social classes. Mobility is the touchstone of a status system. It is on this very point, curiously, that we have the greatest shortage of data. The newer findings suggest that one's chance of upward (and, of course, downward) mobility has not diminished during this century at least. Sons of farmers and laborers and clerks are finding it slightly easier to reach top positions in business. Farm ownership is at a high level. The recruitment base for the professions seems to be widening. The correlation between individual ability and occupational position appears to have become closer, while the correlation between parental income and one's own occupational position or one's schooling gets smaller.¹⁰

How many of these conclusions, to

¹⁰ In no other country does the child of a laborer or a farmer have so good a chance to obtain a higher education, though even here his chance is, of course, not so good as that of the son of a business executive. In few other countries, if any, does the professional man's child have so little differential advantage. See C. Arnold Anderson, "Social Status of University Students in Relation to Type of Economy: an International Comparison," *Transactions Third World Congress of Sociology*, V:51-63, 1956. One would obtain quite a different impression of American education from this survey than from W. L. Warner et al., *Who Shall Be Educated?* (New York, Harper and Brothers, 1944).

bring this inventory to a close, would one obtain from the reports of community studies of social class? Yet it is these community studies that are generalized in the textbooks and popular articles. The conclusions suggested here as probable just do not harmonize with the prevalent picture of the American class system that has been disseminated during the past two decades. Is it temerity to suggest that curricular revision be postponed or based upon a wider survey of the literature?

There is a dilemma any of us must confront when he takes up the study of social stratification. On the one hand there are all the inequalities in the distribution of goods and opportunities and there are the infinite shadings of snobishness. Some of these discriminations can probably be diminished or eliminated. But on the other hand, it must be recognized that some sort of status system is an inherent part of any society.¹¹ The basic issues, if we are realistic, must then center on the kind of status system. Perhaps some of what seem to be dysfunctional aspects of stratification are the price of the desirable features. Perhaps many "undesired" aspects of status are not really problems to be solved.

¹¹ Two quotations may be taken from an article whose theme is parallel to the present one, though stressing different points: F. McMurray, "Who Shall Be Educated for What?" *Progressive Education*, 27:111-16, 1950. "If the present class structure in American society operates against equality of opportunity, and if its presence is a cause of snobbery, competitive social climbing, and countless slights against pride and security, then why should it be proposed, by the very people who bring these unhappy consequences to our attention, that we accept it and adapt our children to it?" (111) "This program is through and through self-contradictory, for it asks that we use the schools to institute a change in culture of considerable magnitude, and it is precisely the declared impossibility of so using the schools which is supposed to have been the basic rationale of the whole program." (114)

We must build our courses of study on real societies, not utopias. Measured against perfect equality, educational opportunity, for example, is far from this goal in America. Measured against the scale of actual societies, America is at or near the more equalitarian end of the line. But we have to think of status quantitatively. When we compare the distribution of schooling with the distribution of income, vague descriptive labels are too blunt tools for the task. In thinking about vertical mobility, similarly, we must apply a little arithmetic. Even if all the upper classes were by some magic annihilated each generation, only a small fraction of other classes could find room in the upper stratum.

Finally, a glance may be taken at the problem of class struggle. Clear-cut class

issues are playing a steadily diminishing role in politics. The struggles today are between the big politico-economic blocs: labor unions, business associations, farm organizations; American watch manufacturers versus American manufacturers of products purchased by Swiss watchmakers, and so on.

Suppose we do wish to use our schools to facilitate the maintenance of an open society. Is it really efficacious to take time to discuss our social class system? Perhaps it would be more useful to instruct pupils about the fallacies of tariffs, the inflationary tendencies of escalator wage scales, the disadvantages of fixed as against merit wage scales, or the fallacies of parity prices. Class issues are not going to be settled in class terms but in these other guises.

The Writings of William F. Russell

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RARELY does one look to an educator's administrative papers for the distillate of his professional wisdom. Yet William F. Russell's twenty-seven annual reports to the Trustees of Teachers College not only hold the key to his educational thought, they make quite remarkable reading in their own right. They range in subject from the internal problems of a large faculty to the deepest relationships between education and politics. The most limited in scope are never parochial, while those of greatest breadth are inevitably directed to gnawing questions of educational practice. Throughout they are bound together by a common sounding of the classical theme that he who would educate must first ponder what it is to live well.

The theme is no surprise, considering Russell's background, training, and temperament. He had literally grown up with Teachers College and American education. Through his boyhood home had come a procession of notables from every domain of the educational world. He had attended the Horace Mann elementary school when it was still housed in the upper floors of the Teachers College Main Hall and had been graduated from the high school soon after Horace Mann had

moved to its new building on 120th Street and Broadway. Upon finishing his undergraduate studies in history at Cornell, he had taught for two years in Colorado, returning to Teachers College in 1912 to complete his work for the Ph. D. degree. Thereafter, in connection with posts at the George Peabody College for Teachers and the State University of Iowa, he had travelled widely in Europe and Asia on a variety of educational missions. When he returned to Teachers College in 1923 as professor of education and associate director of the recently formed International Institute, his record as an educator of stature was already impressive. Four years later he succeeded his father as dean, holding the post through the turmoil of depression, war, and post-war readjustment. After a short term in the newly created presidency of Teachers College, he retired in 1954, not to mellow years of elder statesmanship but to the demanding executive post at the International Cooperation Administration in which he was actively serving at the time of his death.

Even a hasty perusal of Russell's writing indicates a fascinating catholicity of educational interest. He was first and foremost an interpreter of American edu-

cation, dealing repeatedly with such grand themes as democracy, liberty, equality, and discipline as they bear on the work of American schools. His concerns ranged from the nursery school to the university, from preparation for citizenship to the maintenance of good health, from the apprentice training of the adolescent to the proper use of adult leisure. As early as 1918 he published a long essay on "Education in the United States of America" in Peter Sandiford's volume on *Comparative Education*, and his interest in the critical interpretation of American education never waned.

There is another sense, however, in which this early essay in the Sandiford volume is perhaps even more significant. Throughout his life, Russell was intrigued with the method of comparative education. His forte was not so much the compilation of data about foreign educational systems, although his *Schools in Bulgaria* provides a fine example of pioneering work in this field. Rather, he excelled in his ability to *apply* his comparative studies not only in understanding and improving American education but in sensitizing American educators to the international dimensions of their work. Here more than anywhere, perhaps, contemporary comparative educators may learn from Russell; for the failure so to apply their data is too frequently the salient weakness of their discipline.

In the field of history, too, Russell put his knowledge to work. For him good history could never be mere chronicle; it had to illuminate the present and the future. And interested as he was in the relation of education and politics, his lifelong fascination with the French and American revolutions served him in good stead. He peppered his writings with allusions to Washington, Jefferson, Colbert, Napoleon, Pitt, and Castlereagh, and

whether or not one agreed with his interpretations of the eighteenth and nineteenth centuries, his analyses inevitably cut deep. Little wonder that his discussions of citizenship education went far beyond the all-too-usual cant about memorizing the Declaration of Independence and voting on Election Day.

Granted these more cosmic interests, Russell never disdained the organizational, administrative, or financial aspects of education. Hence his frequent essays dealing with the relationship of quality, quantity, and economy in education; with the bearing of a nation's political commitments on its educational administration; with federal aid as a solution to the financial problems of American education; and with the impact of industrialism on the organization of American schools. Furthermore, at no point in his consideration of organizational matters did he ever lose sight of the elemental fact that no school is better than its teachers. He worked tirelessly to improve the education of teachers and the conditions under which they labored. In reading his essays, it is frequently a matter of delight to see his artistry in taking an abstruse discussion of some philosophical or ideological issue and pointing out its clear relevance for professional education. Moreover, he was able effectively to combine this interest in teachers with his deeply held commitment to internationalism; the result was the World Organization of the Teaching Profession, organized largely through his efforts and of which he was first president.

One is impressed, throughout, with the pungency of Russell's prose, a pungency which was so much an extension of his personal forthrightness. Consider, for example, several of his titles: "Where Are We Going and Are We on the Way?"; "How to Tell a Communist and How to

Beat Him"; "Public Education and the Depression: Must Our Children Share?"; or "Education, a Liberty We Prize and a Right We Will Maintain." Perhaps they leave too little to the imagination; but in a field notorious for its jargon, they are a breath of rhetorical fresh air. One is impressed, too, with the variety of journals—popular and scholarly—which carried his articles. To address classroom teachers and the public, as well as the world of high scholarship, one must publish in magazines read by classroom teachers and the public—and in prose that will command their interest. William F. Russell had a knack for this; and it is no surprise that while others were wringing their hands in the face of postwar educational criticism, he was writing his last published book, *How to Judge a School: A Handbook for*

Puzzled Parents and Tired Taxpayers.

In the final analysis, however, one is drawn constantly to his annual reports. Here were the man's most penetrating insights; here was his most polished prose. It is said that he worked uncommonly long and hard over these essays; perhaps he himself had a sense that they would be his abiding testament. The questions they pose are classical; but their discussion is distinctly modern. And while the hard political realities of the twentieth-century world condition their every judgment, Russell's faith in education pervades them all. One cannot read these reports and remain unmoved; they inevitably invite comparison with a similar set of reports which a century earlier had stated so well the case for the American public school.

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1929-30 Secondary Education for Industrial America

1930-31 European and American Teacher Education

1931-32 Education and the Depression

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| 1933-34 | The Reorganization of Teachers College | 1944-45 | Education and Postwar America |
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Edward Samuel Evenden, 1884-1957

THERE are men whose identification with their field of work is so close and whose devotion is so real that their names become synonymous with their chosen area of service. Such a man was Edward Samuel Evenden. For a half century he labored in the field of teacher education. Much of the progress made during this period in this area was an outcome of his leadership and dedication. He deserves the honorary title of "Mr. Teacher Education."

Professor Evenden's death on October 19, 1957 in Long Beach, California, marked the passing of one of the significant educational leaders of our times. As President Hollis Caswell of Teachers College stated, "Professor Evenden was one of the pioneering leaders in teacher education. Much of the frontier thinking in this area was the result of his efforts."

Dr. Evenden began his professional work in Oregon in 1903, where he first served as teacher and superintendent of schools, and later as head of the department of education of the State Normal School, Monmouth, Oregon. He completed his notable career a half century later at Teachers College, Columbia University, where he had been a member of the faculty and administrative staff from 1920 until his retirement.

Professor Evenden was born in Oregon on October 29, 1884. His early schooling and professional preparation were obtained in Oregon and at Stanford University, where he earned his A.B. and A.M. degrees in 1910 and 1911, respectively.

In 1918 he came to Teachers College, Columbia University, to work for his doctorate. He had come to stay, for in 1920, after earning the Ph.D. degree, he was appointed an assistant professor. He rose rapidly in rank and in esteem at Teachers College and became a key leader in the development of the program there. In addition to carrying his professorial duties at Teachers College, he served as Executive Officer of its Advanced School of Education and Chairman of its Committee on the Doctor of Education Degree, and as a member of the Committee on Instruction, Faculty of Philosophy, Columbia University.

In 1912 Evenden married Louise Marcus, who was the gracious hostess and friend of hundreds of students during the many years of her husband's service at Teachers College. The daughter of the Evendens, Louise Anne (Mrs. James S. Crafts), has served as a teacher of art and is the mother of a son and a daughter. Her husband is a professor at Long Beach State College in California.

Professor Evenden was a leader in the development of teacher education in the United States during the first half of this century. He directed and participated in numerous surveys of school and college plants, curriculums, and professional personnel. From 1930 to 1933 he directed the National Survey of Teacher Education, under the auspices of the United States Office of Education, and wrote two of its influential six volumes.

He headed important agencies con-

cerned with the improvement of standards for teacher preparation, such as the Commission on Teacher Education of the American Council on Education. He was influential in forming the American Association of Teachers Colleges, and, as Chairman of its Committee on Studies and Standards, did much to improve accrediting and other standards of institutions concerned with teacher education. He was a member of several scholarship and honorary fraternities, such as Phi Beta Kappa, Phi Delta Kappa, and Kappa Delta Pi. He was a Laureate Counselor of the latter society.

Professor Evenden served on committees of a wide range of national organizations, such as the National Education Association, the National Society for the Study of Education, the National YMCA, and the League for Nursing Education. He was author or co-author of *Standards for College Buildings*, *Education in a Democracy*, *A Quarter of a Century of Standards*, and *Control and Support of Teachers Colleges*.

Sam Evenden, as he was known to his many friends, was more than a teacher of teachers and a leader in the improvement of the profession of teaching. To the many hundreds of students who had the privilege of working with him, he was both a counselor and a friend. He never let his striving for high professional accomplishment submerge his warm human qualities. He was the kind of teacher who made a difference in the personal lives of many appreciative students.

Edward Samuel Evenden needs no monument of stone; his memorial will be found in the lives of many hundreds of teachers and executives in schools, colleges, and universities throughout the nation and in many foreign lands. They serve better because they have been in his classes and have had his friendly advice as counselor and friend. Countless thousands of children are being better taught today because of the work of Sam Evenden. They, too, are a part of his living monument.

JOHN K. NORTON



REVIEWS

A Fourth of a Nation, by Paul Woodring. New York, McGraw-Hill, 1957. 255 pp. \$4.50.

The demise of *Progressive Education* magazine last July marked the end of an era in American pedagogy. Yet one would hardly have realized it from the pitifully small group of mourners at the funeral. Indeed, were it not for the obituary Benjamin Fine thoughtfully inserted in the *New York Times*, few outside the dwindling list of subscribers would even have known. Why this oblivion for a journal that once commanded world-wide attention? The appearance of Mr. Woodring's new book just two months later ought to provide some fruitful clues.

Woodring, who teaches psychology at Western Washington College of Education and has served as consultant to the Fund for the Advancement of Education, propounds an engaging thesis. Progressive education, he contends, must be seen primarily as a reaction—in the Hegelian sense—to classicism in pedagogy. The "classic thesis," as he calls it, maintains that man is a rational being; that the proper aim of education is to improve man's ability to reason; that a curriculum designed to do this must be based upon the inherent logic of subject matter; and that the teaching of such a curriculum is an art rather than a science. These tenets, Woodring maintains, dominated American education until the turn of the present century. Then, largely under the influence of evolutionary naturalism, Pragmatism, and behavioristic psychology (and further complicated by the doctrines of Rousseau, Freud, Counts, and Rugg), a new pedagogy arose essentially antithetical to

classicism. It held that man is a physical and emotional being as well as a rational being; that education must deal with the "whole child," not merely his mind; that the curriculum must expand accordingly; and that teachers must be scientifically prepared to accept these new responsibilities. True to his Hegelian analysis, Woodring finds difficulties with both positions. The "classic thesis" has proved inadequate to the demands of universal education. The "progressive antithesis" has been too much preoccupied with negative protest, too little concerned with positive goals; it has been "right in much that it emphasized, wrong in much that it rejected." Thus is the stage set for the primary enterprise of the volume: the effort to formulate a contemporary synthesis.

The result is an eminently sensible cluster of proposals. In a society of free men, Woodring argues, the proper aim of education must be "to prepare the individual to make wise decisions. All else is but contributory." To achieve this aim he proposes a "drastic reorganization" of American education that will prevent present duplication, combine grading by chronological age with grouping by aptitude, and allow proper attention to the more gifted third of the school population. An ungraded primary school, in which the pupil may remain for two, three, or four years "depending on maturity and learning capacity," will be followed by a four-year elementary school and a three-year high school. For some, compulsory education will end at sixteen; others will go on to trade schools, junior colleges, or four-year liberal arts colleges whose programs will be conceived as prerequisite for all advanced professional and

academic work. All teachers will complete the regular liberal arts course and follow it with further studies in philosophy of education, educational psychology, and liberal arts subjects, and in addition, with a paid internship in a school system, closely supervised by properly qualified school personnel. In general, graduate programs for teachers and other professional educators will consist of a proper balance of liberal and professional studies, with no more than one-fourth to one-half of any program given over to courses in Education. (These proposals were given wide circulation by articles in *Life*, *Time*, and *Newsweek* at the beginning of the current school year.)

Simply to sketch the gist of these proposals, however, is to miss the spirit in which they are advanced; and it is this spirit which more than anything else marks the volume. Following in the vein of his earlier book, *Let's Talk Sense About the Schools* (1953), Woodring has bypassed the polemicists in both the classicist and progressive camps and has set out to develop policies profiting from the best of both. If the controversies which have racked the pedagogical world since 1945 are, as President Caswell and the Educational Policies Commission have suggested, a "great reappraisal" of American education, then this volume is one logical outcome. Woodring's approach throughout is conciliatory rather than contentious, experimental rather than doctrinaire. He criticizes shortcomings and appreciates strengths on both sides; he assumes that professors of education cannot be disposed of by incantation—indeed, he recognizes that they have a central contribution to make; and he reiterates in a dozen different ways President Conant's historic plea (at Teachers College in 1944) for a truce among educators. If the volume accomplishes nothing else, it ought substantially to contract the market for pedagogical polemicism.

Now the plea for a truce among educators rests on an important assumption, one that has been gaining widespread acceptance during the past decade; it looks upon the preparation of teachers as a responsibility of

the university as a whole. Charles E. Odegaard, Dean of the liberal arts college of the University of Michigan, in the eminent series of lectures he delivered at the Salzburg Seminar in American Studies during the summer of 1956, invited attention to a fascinating process in the history of American higher education. It is the process by which new professional faculties have broken off from the parent faculty of arts and sciences, independently cultivated new intellectual domains, matured, and then, strangely enough, evidenced their maturity by returning to the parental fold and enriching it with new perspective. The analogy which comes inevitably to mind is that of the adolescent who, having to rebel against his family in the process of establishing his own personhood, marks the beginning of maturity by coming home as an adult. This process of alienation and return—to continue the Hegelian constructions—has marked the life of Medicine and Law in our era; today it is much in evidence in Education. It lends a strikingly hollow ring to faculty-club cracks about the follies of the educationists, and renders somewhat antediluvian that old straw man, the academician, annually trotted out and destroyed in the school of education. Woodring's book exemplifies well this new adult spirit in the university; in so doing, it makes its central contribution.

But granted these merits of the volume—and they are considerable—there are problems to be raised. The truth is not always the midpoint of two extremes, nor is progress always the synthesis of thesis and antithesis, Hegel notwithstanding. Few would quarrel with Woodring's contention that the Progressive Education Association had become moribund, doctrinaire, and cult-like after World War II, and that its passing in 1955 may well have cleared the air. But progressivism in American education has always been much more than the version of it developed by the PEA after 1919. In addition to the philosophical and psychological contributions of Peirce, James, Dewey, Thorndike, and others discussed by Woodring,

progressive education has been the "schooling for life" recommended by Theodore Roosevelt's Country Life Commission, the "social education" advocated by Jane Addams as a member of the Chicago school board, and by Walter Hines Page in his efforts to rehabilitate the South, the community-oriented university, carried to its apogee in Wisconsin by Charles Van Hise and Robert La Follette, and the work-study-play innovations at Gary, Indiana, celebrated in matchless pedagogical prose by Randolph Bourne in the early issues of *The New Republic*. Progressive education was a protest movement, to be sure; but even more than this it was a cluster of positive ideas closely associated with social and political progressivism.

To suggest that the death of the PEA—which itself neither understood nor espoused the whole tradition of progressive education—renders these ideas irrelevant is at the very least cavalier. Moreover, it quickly renders Woodring's "synthesis" suspect. Not only is his understanding of the "antithesis" less than adequate, but the reader has the sense he has heard the "synthesis" before. True Hegelian synthesis moves thought forward to new formulations of a problem. Close study of Woodring's program reveals that it is far more eclectic than synthetic; indeed, it does not take us much beyond—some might even say not as far as—Dewey's *Experience and Education* (1938), or for that matter, his *Child and the Curriculum* (1902). To advance this criticism is certainly not to join in the too-frequent veneration of Dewey; it is simply to compare one Hegelian with another.

Questions must also be raised regarding Woodring's recommendations on the professional education of teachers. Paid apprenticeships, for example, would undoubtedly do much to alleviate the current shortage of teachers; but would the transfer of "clinical training" to the school systems themselves necessarily represent an advance over current practice? The answer, of course, is a matter of heated contemporary debate. Cer-

tainly, considerations regarding the design, coordination, and integrity of professional teacher education inevitably intrude. Some would contend that the nation's medical schools might as well transfer all of their clinical and bedside teaching to the hospitals in an effort to solve the shortage of physicians. To be sure, teachers too frequently, and falsely, analogize to the medical profession. Yet the greatness of American medicine can be traced rather directly to the phenomenal improvements in American medical education during the past fifty years. And those familiar with the work of Abraham Flexner will readily admit that these improvements did not come about by "farming out" the responsibilities for clinical education. Rather, they lay in the retention of full-time professors of clinical medicine and the strengthening of relationships with public and private teaching hospitals whose facilities were partly or totally controlled by the medical school. The process was and is an extraordinarily expensive one; but few Americans are today opposing the expenditures, for the returns have been prodigious.

A final point bears comment. Nowhere in Woodring's careful formulation of organization and program does the reader gain any sense of the variation and pluralism of American education. David Riesman, in his very thoughtful little volume *Constraint and Variety in American Education*, recently described the course of American higher education as a "snake-like procession," frequently with a quarter-century between head and tail. Granted there are school systems which could incorporate Woodring's recommendations to great advantage, there remain rural schools which could still learn much from Roosevelt's Country Life Commission, and poverty-stricken schools which could take profitable lessons from Jane Addams. And granted the elective system is passé, our university deans and presidents still have a great deal to learn from Charles W. Eliot's essays on *Educational Reform*. The PEA is dead, to be sure;

but maybe what is needed in addition to Woodring's solid eclecticism is some more sensible progressivism.

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Soviet Youth: Some Achievements and Problems, by Dorothea L. Meek. London, Routledge and Kegan Paul, Ltd., 1957. 251 pp.

Any American educator who will reflect upon how little he knows about American education will at once realize the great difficulties attendant upon research in Soviet education. It is possible perhaps to become an expert on the educational system of New York City, or to gauge with reasonable accuracy the problems of education in Australia, which does not greatly exceed New York City in population. But education in the Soviet Union is a different matter. Here the student is awed by the expanse of territory (one-sixth of the globe) and by the size of the population (one-quarter larger than that of America). Some comfort can be derived from awareness that in spite of perplexing diversity in administration,¹ the Soviet system is in fact rigidly centralized. But that is only a thin veneer which often renders obscure the endless variety of educational practices far diverging from the theoretical uniformity.

Hence every honest student of the system must admit that Soviet research is partly facts and partly intuition. The new opportunities for travel in permitted regions of European Russia will, no doubt, help to increase factual knowledge, especially if the beneficiaries of such travel guard against imprudent generalizations. But the intuitive feeling for the development of Soviet affairs can be developed only by painstaking study of Soviet sources. A continuous familiarity, not with secondary descriptions of education but with primary documents emanating from schools and agencies of

their administration, cannot really be dispensed with. It is the basic equipment for a study of the system.

But here the language barrier looms large. For a majority of American educators it would be a difficult and perhaps even an unwarranted effort to master the Russian language to the point of following with ease the ceaseless flow of Soviet information, and even more important to catch the nuances that lurk between the lines. Hence the very great importance of the present study. It is a collection of Soviet educational documents and descriptions of school life excerpted by a researcher at Glasgow University from postwar Soviet press.

The value of the volume does not reside solely, however, in thus making primary sources available in English. Translations of Soviet materials have recently multiplied, not the least through the official efforts of the Foreign Language Publishing House in Moscow.² What distinguishes the volume is the way in which these excerpts have been selected and bound together in a harmonious whole by scholarly editorial introductions. The result is a book which "breathes." In four self-contained parts the editor presents in turn the preschool pupils, the school children, the youth of college age, and the parents in school- and out-of-school situations. We are thus able to trace not only the lives and circumstances of youngsters of school age but also the way in which their problems affect the adults around them.

Thus the non-Russian-reading student has an opportunity to catch glimpses of real Soviet people as they go about the business of education, enmeshed, to be sure, in the net of official political orthodoxy, but nevertheless real people whose lives and actions far transcend the rigid boundaries set for them by their government. It is this more genuine view of the Russian people that breaks through the lines of propaganda-slanted texts from which the choice of ex-

¹ See G. Z. F. Bereday, "Recent Changes in Soviet School Administration," *School and Society*, November, 1957.

² See G. Z. F. Bereday, "Recent Developments in the Soviet Schools. II," *Comparative Education Review*, October, 1957, p. 10.

cerpts for this volume inevitably had to be made.

Perhaps the measure of the book can best be tested by illustrations. It has long been a matter of great interest to see how the rapid emergence of an industrial order affects the relations between city and country children. Two examples chosen at random cast significant light on this question. The first excerpt is from *Uchitelskaya Gazeta* and it reports the arrival of a city child in a village.

It took a little time before Alik felt at home in the village. Everything—the people and the life around—was new to him. The evening he arrived he went outside the gate, and was besieged by the collective farm children. Alik showed off, lied that he was getting nothing but “fives” at school and showed them his fountain pen. Just then a cloud of dust could be seen along the road and whips could be heard—they were bringing in the cattle. Our hero, the city boy, who had never seen cows before, flattened himself against the fence. And then suddenly a horned cow went past quite near him and, to the great amusement of everyone else, Alik took to his heels. The children started to make fun of him, wouldn’t let him play lapta or knucklebones with them, and pushed him around a bit at first. (p. 131)

The other excerpt is from *Komsomolskaya Pravda*, and reports a conversation in a freshman trade-school class between a city and a country football player.

“Forward, you say. Tell me, what team did you play for?” he asked.

“Oh, at home, in the collective farm,” Andreika answered a little more subdued now.

“Some team! I play for Novosibirsk,” the lad boasted.

Andreika suddenly felt that his collective farm team had been offended.

“Well, and what if it is a collective farm team? Our village footballers sometimes beat the town teams,” Victor said from his bunk. He said it quietly and with confidence.

Andreika gave him a grateful look. (p. 166)

Here are two simple texts published obviously to promote respect for the rural people. Yet they tell us much more. They give us an insight into the gamut of tensions generated at each point where city and

country meet. They supply a significant additional element for our appraisal of the role of Soviet schools, which are very much a first testing ground for such meetings. Fresh perspectives such as this suddenly loom out from many pages of this book. It ought to be read from cover to cover by all who are intent on acquiring a genuine sensitivity to problems of Soviet education.

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An Educational History of the American People, by Adolphe E. Meyer. New York, McGraw-Hill, 1957, xx + 444 pp. \$6.00.

There can be few in the business of teacher education who are unfamiliar with the cry that courses, seminars, lectures, and textbooks in the field of Education are too often dull, uninspired, and lifeless. Certainly not among this number, to judge from his latest book, *An Educational History of the American People*, is Adolphe E. Meyer of New York University. The postwar years have seen several major textbook-type treatments of American educational history, testimonial perhaps to something of a renaissance in the history of education field. These have been works of genuine scholarship, opening significant new avenues of study and investigation. But one can imagine Professor Meyer pointing to one of these as overly sociological in its emphasis, to another as too heavily weighted on the side of general political and economic history, to a third (on the other hand) as too freighted with the minutiae of obscure curricula and the teaching practices of an earlier day. Professor Meyer clearly set himself the task of enlivening and lightening the study of educational history and in this respect with this book he has, in considerable measure, succeeded. Striving to divest such writing of stuffiness and pedanticism, the author offers a light, occasionally sparkling, and frequently witty treatise on the evolution of

education in the United States. To illustrate, here is Professor Meyer, noting as he discusses the colonial period that "the distractions which assail us everywhere today—the seductions of radio, television, and the movies, the belaborings by the press—were, alas, unknown to our less civilized ancestors, as were the other marvels by which progress has enabled us to ease away our lives." Or as he later considers the modern university curriculum: "Where once the college contented itself with wooing the muses, today it teaches virtually anything for which it can gain an audience."

The effort to stimulate and intrigue the reader is particularly apparent in chapter organization and headings, in the use of footnotes to suggest useful and interesting avenues for further study, and in the excellent and artful illustrations. Especially noteworthy are the brief discussions of salient socioeconomic conditions and trends to illuminate developments in education. Moreover, the author aids the student with many useful, and at the same time provocative, generalizations; for example, "The advantages which allowed education to thrive very early in Massachusetts were missing in the South"; or "The plain fact is that before any movement for teacher training could become an actuality, education itself had to be set firmly on its feet"; or, again, "Nevertheless, the New Education, whether public or private, is as much the product of the era, with its changing values, as are the transformations in business and industry."

Note should also be taken of those aspects of the American educational endeavor with which Professor Meyer deals which have heretofore received less attention than is their due. Among these matters are the credit side of the monitorial system, the details of the beginnings of both women's education and teacher education, and such facets of the history of adult education as Cooper Union, the Brooklyn Institute of Arts and Sciences, and correspondence schools.

Unhappily, this is only half the story for, with all its good points, this is a disappoint-

ing book. In part, this is a matter of style—the light touch, the search for the different word, get out of hand in ways which could bewilder or exasperate the collegiate reader. A medical student becomes a "nascent Hippocrates," the frontier is described as "the far-flung rustic pampas," organizations are "sodalities," and the attendants at the colonial grammar school are designated the "short-pants elite." An inappropriate cuteness appears as we are told that "Congress [during the 1870's] did not entirely stop playing doctor at the Southern bedside"; or that "To grapple with such non-academic matters [as guidance and emotional adjustment] some schools have brought trained guides and counselors and similar wizards to their fold."

Professor Meyer confuses rather than clarifies at a number of points. For example, all discussion of the "national system" idea and federal aid seems to proceed from the tacit assumption that such policies are unquestionably desirable; the omission of education from the federal Constitution is explained simply as an instance of the "conservatism" of the founding fathers. A chapter on teacher education presents an account of the development of professional teacher education which leaves quite untouched the questions, so vital today, of the nature and substance of that education. Throughout, as Professor Meyer praises the developments in the field of professional pedagogy while gently chiding professors of education, as he lauds the insights of James or Dewey and their ramifications in classroom practice while writing with tongue-in-cheek of schools wherein Johnny "makes and serves edible meals, builds and ornaments ranch houses [and] receives the guidance that will someday, it is hoped, make for happy and enduring wedlock," the reader is left unguided to the basic educational philosophy which inspired and governed the writing.

Most serious, in the judgment of this reviewer, and most unbecoming in a textbook in the field of history, is the large number of matters of significance on which Professor Meyer renders oversimplified and unsup-

ported obiter dicta. Historically misleading, if not altogether inaccurate, are statements like these, presented by the author substantially without further elaboration:

[of the contemporary South] . . . the land is still belabored by its preposterous politicians, but for every Heflin and Bilbo there is now at least a small posse of earnest and intelligent men, free spirits who are ready to give them combat. (p. 223)

[of Robert Hutchins] He lights no candle on the altar of democracy. . . . (p. 268)

[of the findings of the Eight-Year Study] College students who had been to Progressive Schools [generally] displayed a greater intellectual brilliance. (p. 327)

In similar fashion, Professor Meyer disposes of major questions of educational policy with little or no attention to the serious pros and cons involved in their resolution. For example:

The historic one-room school with its solitary and hard-pressed teacher is [today] plainly an anachronism. (p. 404). [Is it? Or are we actually attempting to recapture certain of the values which many feel are inherent in such a pattern?]

Though the junior college is mainly of good repute, yet some complaints have been lodged against it—chiefly, as usual, on economic

grounds. (p. 346). [Are the *primary* anxieties respecting the junior college economic or curricular, administrative or philosophical?]

The high school's steady and accelerating pursuit of practical and vocational ends is a phase, undoubtedly, of the national pragmatism. Even so, it has caused some critical comments—not many nor bold, it is true, but critical nevertheless. The complainants [sic] are, for the most part, the old-timers, the vanishing gentry of scholars who seek to train the intellect and to safeguard the cultural legacy. Perhaps in practical America the older view is doomed to become an oddity, and any strong support of it, hence, may become somewhat indecorous, and even suspect. (p. 412). [Is any part of this paragraph an accurate portrayal of what is probably the most perplexing educational problem today—the nature of the modern high school?]

Of all the practitioners in the vast realm of teacher education, it falls especially to the educational historian to guard against the excessive claim, the overgeneralization, the unsupported assertion, the unwarranted or exaggerated analysis. As a textbook in this vital field, in the opinion of this reviewer, the present work falls short of meeting these supremely important responsibilities.

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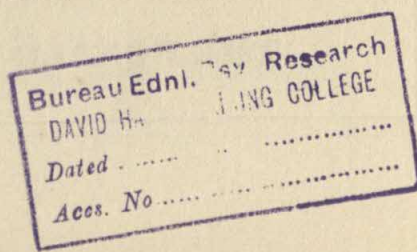
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Foreword

MODERN education's concern for "the whole child" has brought about an increase in the numbers and types of school health personnel giving service in schools. In order to achieve the desired end result of better health for school-age children and youth, careful thought must be given to the kinds of health services needed and to the coordination of the services provided by various personnel. Planning must take into account such matters as: the purposes of the school health program, the contributions to be made by each of the health specialists and by various other members of the school staff, and community resources in the field of health.

It is generally accepted that health service personnel should be available so that schools can: (a) help ascertain whether each child is in a reasonably good state of mental, physical, and social well-being so that he may benefit to the maximum from the educational offerings; (b) assist in identifying the child who may need extra attention in regard to health; (c) promote an environment which is physically and emotionally conducive to good health

and to learning; (d) help provide an adequate plan for the care of the child who needs special attention or who may become ill or hurt while at school; (e) aid teachers in their instruction in health by providing current and factual information in the health field, giving individual instruction in health and occasionally doing direct classroom teaching; and (f) plan with school and community personnel to foster an exchange of information and coordination of efforts on behalf of the child and his family, placing emphasis on the care of the child as a family responsibility.

Among the perplexing operational questions posed by acceptance of the aforementioned general goals are:

What kinds of health specialists should be employed and how may their work best be coordinated with that of private practitioners and public health agencies?

What should be the relationships between the health specialists and the teachers, the administrators, and the curriculum consultants of the local school system?

What processes should individual health specialists use in helping to build a de-

sirable program in their area of concern?

What practices offer most promise in improving school health services?

What personnel policies should be adopted for the specialists who are trained in professions other than education?

In the following pages five specialists in the field of school health (a school nurse, a school physician, a school dentist, a school psychiatrist, and a health educator) present views concerning the roles of their specializations in a comprehensive school health program. The last article discusses the role of the educational administrator in relation to the school health program.

In presenting these articles it is recognized that in some school systems only

a minimum of personnel are presently available for health services. The test of program quality, however, is the end product, regardless of the size of the service. In this instance quality of the product refers to a student, in optimum health for him, who understands how to maintain his own health, how to protect others, and how the various community health services are related. Healthy students leaving school with these understandings, an awareness of unmet needs, knowledge of ways to improve community health, and the desire to put this knowledge into practice will be well-equipped to provide for the next generation.

ELIZABETH C. STOBO
E. EDMUND REUTTER, JR.

The Changing Role of the School Nurse*

DOROTHY C. TIPPLE, R. N.

ASSOCIATE IN SCHOOL NURSING, NEW YORK STATE EDUCATION DEPARTMENT

RAPID change is the keynote of our existence. We are constantly challenged by the demands of our fast-moving world. In the last half century, all of our human institutions, including our schools and hospitals, have felt the impact of scientific and cultural advances. Education must adapt as rapidly as possible to the responsibilities which accompany this accelerated pace of living.

Our school health services, as an integral part of the modern educational system, have developed dramatically since the early 1900's. We have witnessed a mushrooming of activity in this area, until today the health program is one of the most comprehensive services in our schools. It impinges upon every other aspect of the school curriculum and it presents educational opportunities and obligations to every person employed by a local board of education. Moreover, we recognize that we have only begun to explore the potential opportunities in this field.

In order to examine the recent developments in school health services we must look at the framework within which these services are provided. We recognize that the primary responsibility for the health and welfare of the child belongs to the parent. We look upon the

school health service as an extension of family responsibility and as a cooperative activity shared with other community agencies concerned with the health of children and adults.

The school is the official educational agency of the community and its primary function is education in all its phases. Therefore, the emphasis of the school health program is on prevention of disease and promotion of positive health. Diagnostic and treatment facilities are provided, not by the school, but by private practitioners. Other official agencies carry moral and legal responsibilities for health, mental hygiene and welfare.

The school, then, has the unique responsibility to provide a broad health service to carry out the following objectives:

1. To help every child attain the highest state of physical, mental, social, and emotional health of which he is capable.
2. To help every child avail himself fully of his opportunities for education.
3. To utilize the educational facilities of the school to promote the development of sound attitudes, habits, and health knowledge and to help boys and girls become increasingly self-directing in matters pertaining to personal and community health.

Every person employed in a school carries some responsibility for health services. In addition to the classroom teacher,

* Miss Tipple has had ten years of experience as school nurse-teacher in public schools in New York State.

specialists from a number of disciplines may be employed: physicians, nurses, dental hygienists, psychologists, social workers, and others. Health specialists from official health agencies in the community may devote part of their time to school health activities. An effective, efficient service may be expected only when every person understands his role and the role of all others, and where authority has been established to correlate and integrate every aspect of the service.

NEW TASKS FOR THE SCHOOL NURSE

Let us look first at some of the ways in which our basic health service has become more comprehensive in recent years, and has created new responsibilities for the school nurse. The scope of our appraisal program has broadened. All appraisal techniques have a threefold purpose: as screening devices to be used as the basis for referral for professional diagnosis and treatment, to determine health status and discover health problems which may be utilized for purposes of health education, and to serve as an educational device to help students understand the value of routine health appraisal. We recognize the value of teacher- and parent-observation as part of the appraisal program. The role of the family physician is more clearly recognized and better utilized as we stress the value of continuity of service. The school nurse assumes the responsibility for organizing and scheduling the medical appraisal program, and carries out or supervises the other screening procedures.

At one time we looked upon the follow-through program only in terms of obtaining correction of remediable defects. This is still an important function, but we are increasingly aware of the

opportunity for health guidance and counseling with the parent in the home or at school, and especially with the student himself. We include in the follow-through function the responsibility of the nurse to interpret appraisal findings to the classroom teacher and to assist the teacher in making necessary modifications of program to meet individual needs of pupils. Cooperative activity with other community agencies may be considered part of this wider concept of follow-through.

The school carries responsibility for emergency care of illness and injury which occur under school jurisdiction. The nurse serving in the school, with the physician and the school administrator, assumes leadership in developing an acceptable procedure to care for emergencies. She is usually responsible for first-aid instruction to the staff. There is a trend toward decentralization of first aid. Minor first aid may well be given in the classroom, where the educational opportunity for accident prevention and positive safety education is greater.

Problems in communicable disease control have changed radically. There is increased medical knowledge regarding these diseases, improvements have been made in immunizing agents, and there is better parent understanding. We note a continued close working relationship between the school and the local health authorities, who have the legal responsibility for communicable disease control. There is emphasis on the educational program with teachers, parents, and students to promote positive health practices to prevent and control communicable diseases.

In working with handicapped children, the nurse shares with others the responsibility for identifying such children and planning necessary medical and educa-

tional services. Her primary role is one of interpretation of the health needs of these boys and girls to the parents and school staff.

Our early concept of provision for healthful school living was related to the physical environment. The nurse still advises on health aspects of such matters as lighting, heat, ventilation, seating, and cleanliness of buildings. We now recognize that the social and emotional environment is fully as important as the physical, and the nurse sees added responsibility in this area for helping teachers and administrators to provide a good emotional climate for learning.

We are noting a marked increase in the various facets of the school health program in which the school nurse truly becomes an educator or a teacher. The nurse serves as a consultant or a resource person in the regular program of health instruction on both the elementary and the secondary level. She helps to correlate health service and the program of health education. She serves on curriculum committees to assist in coordinating the over-all health education program and in integrating it with other areas of the curriculum. She may teach specific units or parts of units in areas in which she is especially skilled as a nurse, not as isolated topics but as part of an ongoing planned health education program.

The nurse also serves as a consultant to the administrator and the board of education in many matters pertaining to school health. She may act as the school's representative in community health activities. In her role as a health consultant, the nurse serving in the school has a unique responsibility which transcends that of any other member of the school staff.

In a variety of other school activities, she has an opportunity to promote the

concepts of healthful living. She assists in planning programs for teacher health and may have specific responsibilities in relation to periodic examinations for school personnel. She participates in inservice education programs for teachers and in adult education programs. She is making an increasingly valuable contribution to extracurricular activities in the school and to civic groups in the community. Many school nurses serve as sponsor for a Future Nurses Club, which is only one of several ways in which opportunities are utilized to assist with nurse recruitment.

School nurses also share in policy making and program planning. Many of them, in cooperation with the administrator and other staff members, have developed a local manual of policies and procedures. They are also active participants in school and community health councils, and in other activities to assist in coordination of school health services.

It is obvious that the maximum contribution of any school nurse is dependent upon the acquisition of competencies in many areas. It is likewise obvious that the nurse's concept of her function in the school is directly related to the preparation which she has had for this specialized service.

First of all, nursing competency is basic and essential. Technical skills are required to carry out the appraisal techniques. Knowledge of community resources and accepted referral methods is necessary for follow-through. The school nurse needs a thorough understanding of school organization, administration, and function if she is to serve as an emissary of the school and if she is to perform effectively within the school setting.

Most important of all, the nurse must acquire an extensive variety of skills in working with people. Successful con-

tacts with children must be based on genuine liking, understanding of child growth and development, and a real conviction of the potential value of this service. Competency should be acquired in speaking, and in writing for all media—radio, television, newspapers, school publications, and professional magazines. Skill in group dynamics is necessary for effective work with student and adult groups.¹

Promotion of high standards of educational preparation is essential if we expect to keep pace with the increasing demands of the school health service. We need to take a critical look at the basic preparation of administrators and classroom teachers, as well as that of the specialized health service personnel. There is evidence of need for better understanding of the objectives and functions of the school health service. In addition, there is evidence of need to promote understanding of the potential contribution of every member of the school staff to the development of an effective health service program.

We recognize that the nurse serving in the school is a key person, and we must be particularly concerned with her professional education. We are still in the experimental phase in this area of nursing education, but certain principles are evolving which may serve as a guide.

For a number of years, several states have had minimum educational requirements for school nurses, established by State Departments of Education or Public Instruction. We have noted that such minimum standards have helped to increase the quality and amount of preparation for school nurses in every one of

these states and, as a result, school health services have expanded rapidly in these areas.

Recently the nursing profession has taken an active part in studying the functions of the nurse serving in the school and attempting to plan a professional program based on a realistic evaluation of these functions.

It is obvious that we are moving rapidly in the direction of incorporating professional preparation for school nursing in a degree program. Since the minimum requirement for other professional staff employed in the schools is a bachelor's degree, it is reasonable to expect that the nurse should have comparable professional education. It is also reasonable to consider that the specific required preparation for the school nurse should lead to a degree. A series of unrelated courses, regardless of their individual value, is not in keeping with our current philosophy of education. Part of the intrinsic value of advanced professional preparation lies in a broad sociological approach to the field of specialization.

We are currently experimenting or pioneering with a variety of programs on the post-RN, the bachelor's, and the master's level. Continued evaluation of these programs and further experimentation are essential in order to evolve the finest type of professional preparation for the nurse serving in today's schools.

In the past few years we have noted a definite increase in research related to school health services. This is an indication of professional maturity. In addition, it is obviously related to the serious need to examine the functions of the school nurse, to develop techniques to evaluate these functions, and to utilize these findings to channel the nursing ac-

¹Elizabeth Stobo, "Today's Preparation for the Nurse in the School." *Teachers College Record*, Vol. 57, No. 3, December 1955, pp. 196-99.

tivities into those areas where the greatest contribution may be made.

Some of the problems which research might be helpful in solving are: shortage of qualified school nursing personnel, planning programs of professional preparation for school nursing, shortage of qualified instructors for colleges and universities offering professional preparation for school nursing, lack of clarification of functions of all health service personnel, and lack of qualified nursing supervision on the local level. Examination and evaluation of current practices should assist in more realistic planning for the future.

Even as we attempt to evaluate the present, on the basis of the past, we must face the future. We are not permitted to stand still while we scrutinize current practices. What are some of the challenges and problems which we face?

It is apparent that the increasing complexity of our educational system and the additional number of specialists in various related disciplines precipitate a problem which we have long recognized. How are we going to provide qualified nursing supervision on the local level? We have noted that as school systems increase in size we are more likely to find a nurse employed, on a full-time or a part-time basis, in a supervisory capacity. This is a trend which should be promoted and encouraged by the nursing profession.

The School Nurses Branch, Public Health Nurses Section of the American Nurses' Association has recently developed "A Guide to Standards of Employment for School Nurses Employed by Boards of Education." This guide defines three school nursing positions: the school staff nurse, the school nurse supervisor, and the school nurse administrator. Rec-

ognition is given to the fact that the school nurse working alone carries both supervisory and administrative responsibilities. This guide may be used to support our need for qualified nursing supervision.

School nurses should consider the promotional opportunities in the supervisory or administrative position and should seek the necessary preparation. It is interesting to note that the suggested preparation includes experience as a school nurse, academic preparation in supervision, and experience in supervision or administration or both. A master's degree is also recommended.

Another problem which confronts us constantly is the establishment of priorities in service. If we are in accord that the primary function of the school health service is education, we have a major priority already set up. We have barely scratched the surface in developing the educational possibilities inherent in our existing service. We have never fully realized the potential contribution of the nurse as a health consultant and a health counselor.

We need to give priority to better channels of communication and more adequate referral techniques between personnel within the school, and between the school and the community. We need to call on the social sciences to assist us in improving working relationships.

We must never lose sight of the fact that the focal point of all our efforts is the school-age child. Our evaluation should show that we are successful in meeting his various and changing needs, as established in our objectives. Our willingness to change and adapt and modify is predicated on the belief that the school health service is necessary to the completeness of our educational system.

The School Doctor: Link Between Medical Care and School Environment*

MAURICE M. OSBORNE, JR., M.D.

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BECAUSE many school physicians are also active practitioners, I shall start this discussion by considering the relationship of the school to a child's medical care from the viewpoint of the private doctor, and go on to state that any practitioner (except perhaps our exclusively geriatric colleagues) *must* have, by the very nature of his work, a relationship with one or more of his community's schools. Speaking broadly, this relationship is based on the facts that both doctor and school have the school child as a common responsibility, and that what happens to a child's health can affect his school progress and vice versa.

More specifically, the relationship (good or bad) is urged on both parties by the very nature of the practice of good medicine. To a certain extent, the prevention, diagnosis, and treatment of a child's ailments can and should be accomplished between doctor and family without involving the school, and certainly without involving any casually interested enquirer.

But at frequent intervals, each of the

three main elements—prevention, diagnosis, and treatment—may require the doctor's active consultation with the school. Often a true *diagnosis* cannot be made without some bit of information about a school program—the personality of a teacher, for example—and one cannot rely solely on what child or parent may say about such matters. Or again, the over-all *treatment* of a rheumatic heart, or a postoperative spine-fusion, or a convalescent polio case, or an anxiety neurosis, can be affected for good or bad by school activities. The doctor should communicate the need for special programming, and the reasons for it, to the school so that the latter can intelligently aid in the treatment. Or again, the school cannot help *prevent* insulin shock in a diabetic, or injuries to an especially delicate child if it knows nothing about the individual.

Thus, for many of his patients, good medical care is *dependent* on the doctor's cooperation and active sharing of reliable information with the schools. To the extent that any physician realizes and uses this relationship he is, in fact if not in title, a "school doctor." How satisfactory it is if the relationship is based on the doctor's having an intimate knowledge of the school, and a respected and sympathetic school-worker to deal with! And it is

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even more satisfactory if the school knows and understands the physician.

If every school child had a physician who could keep thoroughly informed of his patient's health; keep up to date on programs, aims, and problems of the school; be assured he would be informed intelligently of any relevant happenings and findings regarding his patient at school; find time to confer with the school on any relevant health matters he is aware of; and be sure that his information and advice would come to ears that could understand them, we wouldn't need any appointed school physicians. It would be a Utopian state of Do-It-Yourself.

Sad to say, not every child has or can afford a physician at all. Doctors, even given time they do not have, could know no more than a few of the schools their patients attend, much less all the people in the schools and the activities going on there. Even supposing they accomplished all this, could they be confident of dealing and being dealt with satisfactorily by all of the many people responsible for their patients? Of course not; and hence the School Physician (with capital S and P).

Hence also my proposal for the *real* job of the School Physician—to effect the best possible relationship between the school child's health care and his school environment, which is, after all, what the individual doctor tries to do but, for the reasons above, is so often unable to do. The official School Doctor, being on the one hand a physician and on the other a member of the school staff, is by virtue of his middle stance aware of the problems of both family doctor and the school in serving children. He can implement an effective relationship in both directions.

For the family doctor or other medical resources in the community he can serve as: an intelligible source of relevant and

reliable information on school factors affecting his patients; a source of referral—of both old and new patients; a qualified and trustworthy interpreter to the school of what the child's doctor finds and recommends, where it affects the school; and, incidentally, the common channel for this information.

For the school he can serve as: a source of reliable and relevant health information to school personnel about their pupils; the point for initial referral; and a qualified interpreter of the schools' aims and problems to the family physician in language he can understand.

I see these functions as valuable extensions of both the school's and the family doctor's interest in the health of children, professionally dignified and in no way encroaching on "prerogatives" of either group.

I have purposely avoided, so far, a primary emphasis on the role of the School Physician as an examiner, an excluder-readmitter of children, or a case-finder, because I feel that these activities are *not* ends in themselves, but should be the good tools with which the real liaison job is to be done. And they must be good tools whose primary purpose is the collection of full and accurate information on the child, the state of his medical care, and the school environment as it may affect him. Purpose begetting purpose, the reason for collecting information of this sort is so that it can be turned into action; for example, referral to a clinic for a health problem, or help to a doctor in understanding a child's recurrent stomach-aches, or help to a teacher in making allowances for a child's handicap. The information flows both outward to the family and their doctor and inward to the school, keeping pace with the child, who must live in both worlds.

The information must be full and ac-

curate; action taken or advice given on the basis of anything less can be useless if not actually harmful. For instance, in effecting a good relationship of a child's health to the school, the School Physician may in one case be working with the family doctor. In this situation, inadequate or inaccurate information passed on to the family doctor is treated as such, and does not really help him to help his patient. Or the case may involve referral of a child needing care to a physician or clinic. This often requires all the patience and skill the School Physician and nurse can muster, and in many instances will fail if based on casual appraisal of the situation. Or again, the case may involve making an adjustment in school for some health problem. Recommendations based on a thorough knowledge of the case, the private doctor's wishes, and the school setting will be infinitely more satisfactory than any based on inadequate or inaccurate information.

CHILDREN'S HEALTH STATUS

Information about children's health status is by all odds the commonest type being sought and compiled by doctors in school health services today. Its basic necessity no one doubts, but how shall it be gathered, by whom, how often, and what shall be its scope?

The basic gathering methods are the physical examination, specific screening tests, observation, interview with parents or children or both, health questionnaires or histories, and medical reports from doctors or clinics. The physical examination, coupled with such specific screening tests as height-and-weight, audiometry and vision testing, make up the armamentarium in the great majority of school health services. In some, the physical examination is done by the family's physician, and whatever information it may afford

is submitted in the form of a report.

In a few systems, teacher observation of children and referral to the school physician are the basic tools; the classic "Astoria School Health Project" proved its accuracy and feasibility.

The use of a health inventory, or questionnaire, has not received the investigation it deserves save in a few communities. A history is certainly an indispensable part of clinical evaluation, and should be of health evaluation, but much needs to be done to evaluate its effectiveness and validity; for example, the relevance of the information requested, the ability of parents or children to complete it accurately, and so on.

I make no claims for the supremacy of any of these methods or combinations of them. From the information-gathering point of view, they all have value if, and *only if*, they are conscientiously applied with the object of getting a full health picture of the child. None of them is valuable if the motions are just gone through.

While the choice of methods may vary with the community, I believe that it is the School Physician's responsibility—and no one else's—to choose those that best fit his resources, and then to see that they are applied under high professional standards. In a community with a high level of medical care, the use of a medical report of routine health examinations obtained from the children's physicians may be the most suitable method, *but* the School Physician should see that his colleagues understand that the purpose of the report is useful information, and not just a pass of some sort, and should supply them with report forms and instructions that fill this need. In a community with very few private physicians, the school doctor may have to do most examinations himself, *but* let him remember that he may have to answer

some questions, or make a referral concerning a child. He may feel that the teacher-observation and referral method is the best, given the situation, *but* he must remember that this requires careful and continuing teacher training. Can he do it?

Perhaps the best guide might be as follows: Whatever procedures he adopts, let him think of them as potentially giving information *that would be of real use to him if he were the child's doctor*, and let him examine or supervise accordingly. Let him continually ask whether the method is giving him information that meets the needs of assuring or securing medical care and optimum school adjustment.

STATUS OF MEDICAL CARE

Information about status of medical care is essential. The finding of a scoliosis at a school examination means one thing if it is learned that the condition is *not* under care, and a very different thing if it is learned that it *is* under care. In the first case, the job is twofold: to secure care, and to make any necessary school adjustments. In the second case, only the adjustment is needed. Nothing is more discrediting to a School Physician than to make a recommendation about some condition which conflicts with a care plan already being carried out by the family doctor, and about which the School Physician never informed himself. All too often the latter contents himself with making a finding and then leaving the nurse to tell the family that the condition should be corrected. Not only does this place the nurse in the middle, but it reflects an attitude toward his colleagues that they are quick to resent. The value of making a finding is to relate it, if possible, to the child's care.

There are a number of ways of obtain-

ing this information—the commonest being to leave it to the nurse. While this method is acceptable, the School Physician should make every effort to avoid putting the nurse on the spot. He should emphasize to her that the primary purpose of her report to the parents is not to “get correction” but to find out what is being done. Definite recommendations suitable to each case are of great help to a nurse; the vague instruction to “follow up” is not always sufficient.

I have found the parent interview, at the time of the health appraisal, the most valuable and tactful single method—and almost more essential in assessing the status of medical care than in finding the health conditions.

Direct contacts with local physicians should be used frequently, and here it is preferable for the School Doctor rather than the nurse to make the contact.

SCHOOL ENVIRONMENT

There is no good way to get information about the child's school environment unless the School Physician is accepted as a member of the school staff, and is given enough time (adequately paid for) to take advantage of this acceptance. The methods by which he may gain acceptance might well form a separate report, and will not be entered here.

In a general way, he needs to know the administrative policies of the schools and the personalities of at least the key members of the school staff (principals, guidance counselors, physical educators) and to have an appreciation of what problems they see in fulfilling their duty to children. The list could be extended indefinitely, but one can sum it up by saying that the School Physician needs to know the schools as intimately and as personally as possible.

More specifically, he should meet regu-

larly with principals, nurses, and others to discuss both specific cases and more general health problems in their schools. He should have free access to records of academic progress, guidance conferences, psychological tests, and attendance. He needs, upon request, to have opinions either verbally or in writing from a child's teachers when a problem arises that may have a health implication.

He needs to learn just what kinds of information about children's health teachers really want and can use; otherwise his gathering efforts may not be helpful to them in understanding the child.

RECORDING INFORMATION

Information is often needed well after the event. Records should be so compiled that the School Physician may interpret competently from them to family, family doctor, and school at any time. There is a wide area for work here. Most school health records contain fairly extensive arrays of physical data, but almost

nothing on status of medical care, or school environment as it affects the child.

SUMMARY

One of the School Physician's basic jobs is to see that the health needs of school-age children are met in terms of receiving medical care and supervision in the family setting. But he must also see that those rendering the care have the advantage of any pertinent information about the child's school life in making their decisions, and that the care is extended into the child's school life in ways which are appropriate both to the child and to the school situation.

Good information on the child's health, the status of his care, and his school environment is the indispensable tool in doing this job.

I am aware that there are some aspects of the School Doctor's job not discussed above, such as his role in environmental health and as resource person for health education, but to go into these would exceed the scope of this discussion.

Program Planning for School Dental Health Services*

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THE need for a comprehensive school dental health program may be summarized by considering two generally accepted facts: the school years represent the age of highest incidence of dental defects; and these same school years, particularly the earlier ones, represent the most impressionable age, and therefore the most fruitful area for establishing acceptable behavior patterns in regard to dental health practices.

The movement toward developing adequate dental health programs in the schools is subject to the influence of a dichotomy of philosophies, one representing the desires of the general public and the other reflecting the current thinking of the public health field along preventive lines.

On the one hand, the public health profession has become increasingly aware of the need for interfering with the disease process before onset, or at least attacking it in its early stages. In the area of dental health, the last two decades have provided valuable preventive measures in sodium fluoride and proper diet, in addition to re-emphasizing the need for proper oral hygiene practices and early, regular den-

tal supervision by the family dentist.

Using the Levels of Prevention set forth by Dr. Hugh Leavell,¹ it becomes evident that dental disorders may effectively be attacked at the first and second levels, namely through health education and specific protection, as well as by early case-finding and treatment. Such early interception of the disease process is not only effective but far more economical. Thus the value of an educational and preventive school dental health program becomes evident.

On the other hand, certain changes affecting the role and responsibilities of the home and those of the school have come about during this same period.

Beginning in 1942, fathers who worked overtime or held two jobs and mothers who were employed full-time became an integral part of our World War II economy. Rising family incomes resulted in a higher cost of living which continues to soar, and the resulting economic pressures have kept both parents on the job in order that they and their children might enjoy the enriched environment of our present standard of living.

Whereas many families continue to benefit from a higher family income, it has fallen to the lot of the schools to pro-

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¹ H. R. Leavell and E. O. Clark, *Textbook of Preventive Medicine*, Chapter 2 (New York, McGraw-Hill Book Company, Inc., 1953).

vide much in the way of guidance and services which formerly were the responsibility of the home. Granted that in many cases there is an undeniable need for the double income, the evidence indicates that in many other cases the mother seeks refuge in employment either to satisfy her need for feeling important or useful or to avoid the humdrum daily routine of the housewife.

Obviously it is time for parents and educators to take stock of their responsibilities, and to recognize the fact that the child's welfare is a shared responsibility, not one to be assumed wholly or largely by one or the other.

In a survey done in 1956² it was found that, despite the increased level of purchasing power, only one child in ten has visited the dentist before he enters school. Meanwhile, the public generally holds "tangible services" such as annual prophylaxis and treatment programs in higher esteem than the educational-preventive type of program. In Massachusetts, a school dental treatment clinic may be found in most communities of any size, whereas comparatively little use is made of the dental hygienist in the role of health educator. Efforts are being made to correct this situation, in that topical applications of sodium fluoride are given on a demonstration basis in selected areas.

In a study of health services in Cambridge, Massachusetts,³ a treatment program centered in school dental clinics (with one dental lecturer to serve some 20,000 school children) reported that one out of every four dental operations was

an extraction. A filling-extraction ratio such as this furnishes evidence that the public's sense of values must be altered by means of education to conform with the current trend in public health.

A comprehensive school dental health program could do much to change the public's attitude toward the preventive approach and thus help to resolve the dichotomy.

STATUS OF SCHOOL DENTAL HEALTH PROGRAMS

Before considering the make-up of an adequate school dental health program, it would be well to review the present situation from a nation-wide viewpoint.

In a survey of more than 3000 cities of 2500 population or more, Kilander⁴ presents some enlightening facts. Although 90.6 per cent of the cities reported that dental "examinations" were given in their schools, only 40.4 per cent reported the availability of a dentist, and 15.9 per cent had the services of a hygienist. Without considering that many of these cities may have used both dentists and hygienists in their programs, the proportion of dental "examinations" performed by physicians, nurses, and "others" must be quite sizable.

Furthermore, of the cities reporting, more than 75 per cent provided dental examinations on an average of once every two years or less frequently. About 70 per cent of the cities which provided dental examinations reported some sort of follow-up activity, but many of the schools in these cities did not carry this out regularly, nor were reports from the dentists required as a part of the follow-up procedure in a goodly number of the school systems polled.

² O. W. Anderson, "Family Dental Costs and Other Personal Health Services." *Journal of American Dental Association*, Vol. 54, January 1957.

³ B. Pliskin, H. Averill, et al., "A Study of Health Services in Cambridge, Massachusetts." Harvard School of Public Health, 1956 (Unpublished).

⁴ H. F. Kilander, "National Survey of Dental Aspects of School Health Services," *Journal of American Dental Association*, Vol. 51, August 1955.

Where the dental hygienist is concerned, New York State, having 65 per cent of the hygienists working in the public school systems, was found by Gutman⁵ to provide only a limited program in many areas. Heavy pupil loads (up to 23,000 children per hygienist), necessary travel in rural situations, and poor working conditions all contributed to the fact that complete pupil coverage in the schools each year is for the most part impossible.

Such findings may be assumed to indicate that the situation is no better in other areas of the country.

Responsibility for financing and administering the school health services is borne, in the majority of instances, by boards of education, according to Kilander. Joint financing between the boards of education and boards of health was next in popularity, with sole financing by the latter and by other authorities coming last.

School dental health programs are generally saddled with inadequate operating budgets. In a survey of sixty-seven cities in the United States with a population of 100,000 or more, Streit⁶ found that the median annual expenditure per pupil for dental services was \$0.48, with a range from \$0.02 to \$1.96.

From the author's experience, an annual expenditure of nearly \$3.00 per pupil is necessary to provide a comprehensive educational-preventive dental health service in the schools, using dental hygienists as personnel.

Thus it is necessary to keep in mind the foregoing facts when formulating a

school dental health program outline. Only in this way can the approach be realistic.

PROGRAM OBJECTIVES

Regardless of the nature and scope of the school program, the ultimate objectives should be the same: (1) motivation of the child, parent, and teacher toward acceptable dental health practices through health education, (2) early case-finding and parent notification, (3) adequate follow-up procedures to insure that the child receives the needed care, (4) prophylaxis and topical fluoride treatments where indicated and if the budget permits, and (5) consultative and resource services to the pupils, faculty, and parents in matters of dental health and educational materials.

The above objectives were formulated and translated into Responsibilities of the Dental Hygiene Teacher in the revised school dental health program in Rochester, New York.

PERSONNEL

The responsibility for the program is shared by eight separate people or groups. Their functions are described in the paragraphs which follow.

The School Administrator. "Primary responsibility for the successful functioning of the health program must rest on the school administrator,"⁷ as he is an integral part of the school curriculum. His task is one not so much of supervision or implementation as of active interest and intelligent delegation of responsibilities.

The Health Coordinator. The individual having the most to do with integrating a dental health program into the school curriculum is the health coordinator.

⁷ American Dental Association, *A Dental Health Program for Schools*, Chap. II, p. 9 (Chicago, Ill., 1954).

⁵ R. E. Gutman, "School Dental Health Services in New York State," *New York State Journal of Health, Physical Education and Recreation*, Vol. 9, No. 4, New York, May 1957.

⁶ W. K. Streit, Health Services in City School Systems, *Journal of School Health*, Vol. 26, No. 4, April 1956.

tor or director of health and physical education. Close cooperation between the dental professional personnel and this member of the educational profession is necessary to insure a smoothly running program in regard to pupil-flow, classroom participation, and so forth. Through him, also, accessory services and personnel may be made available, thus lightening the nonprofessional responsibilities of the dentist or hygienist.

School Health Councils. In many communities, schools have health councils which function either independently or, more often, as a part of the parent-teacher organization. The influence of an interested lay group such as this can be a valuable aid in cooperative planning for a school health program.

The Public Health Officer. Being aware of the acuteness of the problem of dental disorders, the public health officer can serve as a useful ally, and his participation should be sought in planning and implementing a dental health program in the schools. He should consider it part of his responsibilities to integrate this program into the over-all health planning for the community.

The Dentist or Dental Hygienist. In the area of direct service, the dentist or dental hygienist, as the case may be, shares the bulk of the professional responsibility in carrying out the objectives outlined above. He has a specialized role to fulfill, being a member of a health profession and not a "full-fledged" member of the school faculty or staff. Because salaries often appear inequitable in the light of the length of schooling (for example, the hygienist's salary compared with that of the classroom teacher), it behooves the dental personnel to tread lightly and to recognize his or her proper status. A

lack of rapport with the school faculty can be the most damaging of influences on the success of the program.

The responsibilities of the dental personnel will be outlined in greater detail later on.

Dental Supervisor or Consultant. Because few school systems employ full-time dentists, the bulk of full-time personnel being dental hygienists, there is a need for adequate supervision to insure high standards and prestige in the eyes of the board of education. Depending on the size of the program, such supervision may be provided either by a part-time dental consultant or by a supervisor of school dental health. If the program is administered by the health department, the director of the dental bureau may furnish this supervision.

It should be noted here that jointly financed programs are likely to meet with difficulty where supervision is concerned.

Public Health Nurse or School Nurse-Teacher. The school nurse, although universally overworked, is a willing and capable adjunct to the program. Where time and money do not allow for adequate follow-up on the part of the dental personnel, the school nurse-teacher or public health nurse usually assumes this function. In the experience of the author, the nurse, more than any other non-dental individual in the program, is most acutely aware of and concerned with the problem of dental defects among her "charges."

The Classroom Teacher. Without a doubt, the classroom teacher has closer day-to-day contact with the school child than anyone else, sometimes including the parents. Her first responsibility is to provide the dental health instruction outlined in her manual or syllabus, which should

contain up-to-date information and materials. Hers is the primary responsibility for educating her pupil in health as well as other subjects.

In addition, she may call upon the dental personnel for advice on matters of dental health materials, or even for classroom participation on a limited basis. The hygienist's role, however, is to *supplement* the dental health instruction given by the classroom teacher, *not supplant it*.

The classroom teacher's daily contact with the children allows her to function as a case-finder. Discomfort or emotional problems caused by dental disorders are frequently obvious to the teacher. Thus she may function in a variety of ways.

PROGRAM PLANNING

Because the nature and scope of the school dental health program are almost entirely dependent on the size of the budget, no attempt will be made here to outline a single type of program which would be applicable in every community. Instead, suggestions will be made for the accomplishment of each objective in order of increasing complexity and cost. Thus the method may be chosen which best fits the needs and facilities of a specific community.

Health Education. This aspect of a school dental health program should be included in the planning of every school system, regardless of size. In combination with fluoridation of the public water supply or topical applications of sodium fluoride, it can constitute the most fruitful effort at "erecting a fence at the top of the cliff rather than stationing a hearse at the bottom."

In smaller communities or where the budget is small, the bulk of the responsibility will rest with the classroom teacher. Where possible, the community

dentist or school nurse should share this responsibility either by taking an active part in classroom presentations or by serving as a consultant in matters of dental health and educational materials.

There are numerous sources for suitable dental health education materials. The American Dental Association, its component State Societies, and various commercial concerns, such as Procter & Gamble, Bristol-Myers, and the Dairy Council, are able to supply materials in quantity either free or at low cost. There is, however, a need for suitable and accurate materials for certain age groups. Some health educators blessed with a more adequate budget have been able to compose and have printed their own educational materials.

To assist the classroom teacher in her selection of materials, we in Rochester set up an Advisory Committee which reviewed all available existing dental health education materials for authenticity and suitability. Then the best materials for specified age groups were placed in packets and sent to each school, to be used as a reference for selection. This plan has been well received, and has served to stimulate the use of such materials in the classroom.

Three groups of people should be considered when we talk about health education in a school system. First, there should be in-service education of the classroom teacher by someone familiar with the newest concepts in preventive dentistry. This could be the most effective area of participation for the community dentist, and it would serve to keep the teacher up to date in her presentations.

Second, there are the classroom talks and projects for the school children themselves. In this area, we have found that active participation by the child, for

example, projects, posters, and plays, enhances the value of the instruction and makes it much more enjoyable.

The third group, but by no means the least important, is the parents. Certainly, to improve a child's dental health would require a cooperative effort between child and parent. We have found that the new emphasis on health education in our program has stimulated parental interest, and many more opportunities present themselves for appearances before P-TA groups, guided observation groups (mothers of preschool children), and other community organizations.

Through indoctrination of the teacher, child, and parent there is a much greater chance for success in an area which has yet to provide positive statistical proof of its worth.

Early Case-Finding and Parent Notification. In communities where a restricted budget or unavailability makes it impractical to utilize professional dental personnel to carry out the dental examination, it becomes necessary to rely on the findings of the school physician or nurse. Although this is not the most sensitive of indices to a child's dental health, at least those with obvious dental disorders will be screened out and the parents should be notified.

As an adjunct to such a service, some communities distribute to every child in the school dental health certificates which are to be returned to the classroom teacher after the child has been examined by the family- or clinic-dentist and the card has been signed by him. In some plans these certificates are signed only after all apparent dental defects have been treated; in others it is necessary only that the dentist have begun active treatment. It is the opinion of the author that once the child has sought treatment in the

clinic or private dental office, the responsibility of the program has been discharged, and it is the dentist's responsibility to carry treatment through to completion.

In areas where it is feasible to use dental personnel for the examination, there seems to be little value in exhaustive dental examination of the child unless it is done in conjunction with a school dental treatment clinic. As a rule, however, the American Dental Association Type 3 Inspection⁸, requiring only a mouth mirror, explorer, and adequate light, will suffice.

No matter who is responsible for the dental examination, a record should be kept of those children in need of dental attention, preferably with some indication as to the nature and severity of the disorder. Otherwise, an adequate follow-up would be impossible.

Parent Notification systems vary from the sending of a simple printed statement to the effect that the child is in need of dental attention to the triple postcard system now in use by the New York State Department of Health.

In Rochester, where the school dental inspection program has been in effect for some time, the public has become accustomed to receiving notification when the child needs dental attention. At the same time, many of the children are familiar with the practice and reluctant to deliver the "bad news" to the parent; so it becomes "lost" on the way home. To minimize this problem, we have found that two measures are effective. First of all, the notification, in postcard form, is mailed to the parents of all children in need of dental attention. Second, those children who have no apparent dental defects, as noted by the dental hygiene

⁸ American Dental Association, *op. cit.*, Chapter III, p. 16.

teacher, receive a green card stating that no apparent defects are present, but "this does not take the place of regular, periodic examinations by your family dentist." In such a way we minimize the false sense of security brought about when no notification is received and also the utter dependence of many parents on the hygienist's findings as an indication of need for dental supervision. We have also found that the use of appropriate colors has some merit in that fewer mistakes are likely to be made in issuing the notifications, and they provide the proper connotation to the child who receives them.

Several localities motivate the children to seek dental care by placing the return of the Dental Certificates on a competitive basis. Teachers strive for 100 per cent rows and 100 per cent classes. In the author's opinion, such a plan is unfair both to the child and to the parent, since it places undue pressure on each in cases where finances do not permit obtaining proper dental care and no free clinics are available.

Follow-up. Follow-up procedures must be geared to the time available for such activity. In areas where the hygienist or dentist has a heavy case-load representing several schools, or where neither of those specialists is available, the bulk of responsibility for the follow-up must fall to the school nurse.

Where time permits, two procedures have been effective. They may be used independently or jointly. Telephone conversations with delinquent parents often bring results, and are not very demanding of the hygienist's time. There are the disadvantages of being unable to contact every parent either because some have no telephone or because both parents work during the day.

The method of choice is the home-call

by the hygienist. This, of course, is more time-consuming, but the advantage of personal contact is great.

Follow-up activity should be initiated within three months after the Parent Notification has been sent out, using the pupil's permanent dental record as a guide and contacting the parents of those children whose records indicate that the Dental Certificate has not yet been returned. The ratio of Dental Certificates returned to Parent Notifications sent out serves as one method of evaluating the program's effectiveness.

A problem which appears to be universal is that of excusing the child from school for dental care. The attitude toward this varies with the individual school, some accepting the dentist's appointment card as sufficient, others requiring a note from the parent, and still others not allowing absence for dental treatment.

New York State, as well as many other states, has permissive legislation which recommends that children be excused from school for health purposes.

A recent workshop in Rochester⁹ which included both school and dental personnel uncovered the reason for much of the difficulty. Dentists generally do not appreciate the problems created in the school by excusing a child for a dental appointment, and because the dentist is often behind in his schedule, the child may miss a half-day of school needlessly. Neither do school personnel realize the difficulty for the dentist inherent in keeping a tight schedule, or the impracticability of scheduling all school children after school hours. The workshop did much to promote mutual understanding, and the schools have been somewhat

⁹ Rochester Dental Society, *Report of the Working Conference on Dental Health Education* (Rochester, New York 1956).

more lenient in their attitude, having been assured by the dental personnel present that a renewed effort would be directed at intelligent scheduling of school children, that is, first appointment in the morning or afternoon if it must be during school hours, and at keeping reasonably close to schedule.

The Dental Society of the State of New York has printed an excellent excuse card which is enjoying only limited use. Bearing the seal of the Society, it has an official appearance which meets with less resistance in the schools. Such notices should be more widely used.

Prophylaxis. In keeping with the present trend, today's parents demand a service from the school dental health program, and generally are unappreciative of its other aspects. Conversely, an education-centered program tends to steer away from prophylaxis as a "free dental service."

By doing prophylaxis only where the need exists, as shown by examination and questioning of the child, more time is left for the more constructive part of the program, and more children can be seen. In Rochester, we regard prophylaxis as an educational measure at kindergarten and first-grade levels, so that all children in these grades receive prophylaxis. For many of them this is their first dental experience, and a painless, pleasant time will help make the child a good patient for future dental care.

Consultant and Resource Person to Faculty, Students, and Parents. In addition to the dental problems which arise in the school atmosphere, the hygienist is often confronted with a request for information regarding appropriate dental health teaching materials. In the former instance, she should be able to recognize

conditions which warrant referral to the dentist and should advise the child or the parent, or both, in this regard. In the latter, the dental hygienist will find it advisable to keep abreast of new developments in health education materials, to be aware of their contents and of the age range for which they are suitable.

In the Rochester program, in-service seminars are given periodically throughout the school year in which such subjects as nutrition, dental caries, health education, periodontal disease, and orthodontic problems are discussed by a qualified person for an entire session. A question-and-answer period is very effective in tying up the discussion topic with the hygienist's school responsibilities.

To lighten the burden somewhat in regard to health education materials, we have prepared dental health education kits, as previously stated, for distribution to all principals, school nurses, and hygienists. These are divided into three sections, to contain sample pamphlets, posters, film listings, catalogs and order blanks suitable for each of three grade spans: kindergarten-grade 3, grades 4-7 and grades 8-12. These materials were selected from a great number of such materials by a committee chosen by the Director of Dental Health, with representation from the Board of Education, school nurse supervisors, health educators, hygienists and the dental profession. Selection was based on authoritativeness and coverage of the proposed dental health units at those grade levels.

Where time permits, an additional activity has been found to be most fruitful. The hygienist should take part, if possible, in school health forums, faculty meetings, parent-teacher gatherings, and so on to bring the dental health problem before a more representative group.

DENTAL CARE

No matter how effective the motivation supplied by the school dental health program, it cannot be considered a complete program unless some provision is made for dental care among children of indigent and borderline-income families.

In most states there are official and voluntary agencies to provide this care for the indigent, though perhaps not all of them. School, nursing, and dental personnel should be aware of such facilities, so that parents may be directed to them where the need exists.

The borderline-income group presents an even greater problem. Few cities can boast clinical facilities supplying low-cost or free dental care for this segment of the population. Even where such facilities exist, they cannot provide a sufficient volume of service to take care of the growing need.

In every instance, local dental societies must be educated regarding the extent of this problem, and the cooperation of the individual dentists sought to donate a small segment of time to these unfortunate people.

As an example, if each of the 300 dentists in Rochester were to set aside one hour per week for such an activity in their offices, the service provided would approximately equal that of the Eastman Dental Dispensary in the course of a year.

EVALUATION

Until recently there were few reliable measures for determining the effectiveness of a school dental health program. Since the success of the program is of interest and concern to a wide variety of people, some method of evaluation is necessary.

To gauge the influence of the activity, one must determine to what extent the

original objectives as stated have been met. Such information may be had from:

1. The ratio of children receiving dental attention to those who were found, in the course of examining, to be in need of it. Adequate records are necessary so as to record the individuals who have received referral cards or slips, and those who have returned dental certificates. Of course, a base-line determination is necessary to insure an accurate evaluation.

2. A comparison of lactobacillus* counts from random samples of school children before and at periodic intervals after instruction in proper oral hygiene practices and dietary habits.

3. A comparison of DMF† permanent teeth or surfaces or both among a random sample of the school children in all age groups, taken at the start of the program and annually thereafter.

4. Short examinations on dental health given in the classroom at the beginning and at the end of the school year. Excellent examples are furnished in the ADA teaching guides.¹⁰

5. A variety of other, less quantitative factors, including parental attitudes, acceptance in the schools, and reactions of the dentists in the area.

Here again the nature and extent of the evaluation procedure depend on the amount of available time and budget. Immediate results may be discouraging, for even the most comprehensive program is confronted with many obstacles due mostly to human factors such as lack of interest, procrastination, and poor economics. It takes years to change public opinion and habit patterns.

* An organism found normally in the mouth which acts as an indicator of bacterial activity.

† Decayed, missing, or filled permanent teeth.

¹⁰ American Dental Association, *Dental Health Teaching Outline*, No. III and No. IV, revised (Chicago, Ill., Bruce Publishing Co., 1953).

SUMMARY

In summarizing, it might be well to restate the objectives of a school health program in simplified form to read: the prevention of discomfort, loss of esthetics, and malfunction through motivating the school child and those in his environment toward early and adequate dental care, acceptable oral hygiene practices, and proper diet.

Many lists of objectives have been formulated, and every objective would seem to be included in the above statement.

The extent to which such objectives may be reached is dependent, first of all, on the size of the budget. The old public health saying "the most good for the most people" has long been known to be a fallacy. Where budgets are low the number of age groups to be served must be

cut down so that those who receive the program may benefit from a comprehensive service. Where selected age groups must be served it is a good plan to start with the lowest age groups and work upward on an incremental basis, exactly as is done in the Philadelphia program.

The demand for and planning of a school dental health program ideally originate from the community in the form of a school health council or a citizens' committee for dental health.

Implementation of the program is the concern of a variety of disciplines working in harmony. The service involves a true team approach, with hygienist, dentist, nurse, school administrator, and teacher all making their contributions. Only the complete cooperation of every member of this team will insure the success of the program.

Functions of a School Psychiatrist*

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ALTHOUGH for a few decades psychiatrists have rendered various services to schools here and there, a perusal of the literature reveals that the functions of school psychiatry lie in a largely uncharted area and the role of a psychiatric consultant in a school situation is an unstructured one. The uses made of a psychiatric consultant or school psychiatrist are a reflection of the psychological awareness of the school system and the community. Psychiatrists have served various purposes, all the way from acting as legal rubber stamps in school exclusion proceedings to genuine leadership as coordinators of a comprehensive mental hygiene program. It is largely with the ramifications of the latter role that this discussion will be concerned. The various complicating and limiting factors will be considered and an effort will be made to give some structure to an observation made by Berlin: "I am certain that each consulting psychiatrist must find the ways in which he works effectively."¹

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¹ I. M. Berlin, "Some Learning Experiences as Psychiatric Consultant in Schools," *Mental Hygiene*, April 1956.

From the rather meager literature on the subject one learns that psychiatrists who have worked in school settings have varying conceptions of their proper function. Most of them have come into positions in school systems in a hit-and-miss fashion, often through some purely personal association with a modern-minded school administrator who, because the field is so new, brought the psychiatrist into the situation over the more or less silent skepticism of his colleagues. School administrators have not known what qualifications to look for in a prospective school psychiatrist and few psychiatrists have understood what preparation on their part is required to function as a school psychiatrist. Sometimes the school psychiatrist has foundered on the rocks of projected hostilities because he had no foreknowledge of what he was running into and again because there are so few charts to go by.

The development of a comprehensive school mental health program is in effect the working out of new conceptions and a new field—that of educational psychiatry. The concept of educational psychiatry first came to the attention of this author in 1946 in a paper written by Carolyn Zachry shortly before her death. The paper ended with the statement, "The work of relating the fields of psychiatry and education presents the challenge and the difficulty that have always

attended pioneering but it promises rich rewards."² Much has been written since those prophetic words, but it is very significant that ten years later one of the most stimulating articles in this area was written by an assistant superintendent of schools.³

A comprehensive school mental hygiene program requires a comprehensive view of psychiatry as a parent discipline (albeit a sometimes unrecognized and neglected parent), or perhaps more explicitly as a focusing discipline which draws upon many other branches of the science of man in an attempt to help man adjust to his environment—not only his physical environment but the cultural environment which he himself has created. We must emphasize, however, that this attempted adjustment sometimes may require understanding and discrimination regarding where that environment itself may need to be adjusted to meet basic human needs. This very understanding and discrimination may be considered a branch of psychiatry, although as yet unstructured and unnamed, in which the whole field of psychiatry must eventually as a focusing discipline play an integrative role.

Thus psychiatry draws upon anthropology (particularly ethnography), sociology, psychology, semantics, general medicine (particularly neurophysiology—the electroencephalograph was invented by a psychiatrist), and neurology. Even the field of biology has its contribution to make to psychiatry; animal psychology—or behavior biology as I prefer to call it—has made some significant

contributions to the understanding of maladjustment, conflict, and mental illness in human beings.⁴

In its broadest sense, the focus of psychiatry is on not only the preventive, diagnostic, and treatment aspects of problems of the adjustment of human beings to the world in which we live but also the development of an optimum capacity in those human beings to modify that world constructively to meet their needs more satisfactorily and to help man cope with the emotional factors that so often stand in the way of learning to profit from even unpleasant experience. In its application, psychiatry embraces and uses many techniques and approaches to problems arising in human development and adjustment, including play therapy, parent counseling, psychological testing and projective techniques (the Rorschach test was invented by a psychiatrist and first received recognition among psychiatrists), psychoanalysis, electric shock and drug therapy, and even surgery on certain psychotic patients.

The idea that psychiatry is concerned with the individual only after a so-called breakdown has occurred is as limited as the idea that pediatricians, dentists, and other medical specialists are concerned only with treating contagious diseases, orthopedic disabilities, dental caries, and the like and not with their prevention (or that the reduction of the number of cases of tuberculosis resulted only from "treatment" of the disease). Certainly, in a school setting pediatricians and dentists are expected to place their major emphasis on preventive measures. Similarly, this expectation can be applied to the role of psychiatry in a school setting. Another parallelism arises. In their preventive ef-

² Carolyn Zachry, "A New Tool in Psychotherapy with Adolescents," in *Modern Trends in Child Psychiatry* (New York, International Universities Press, 1945).

³ Leon Mones, "Psychiatric Insight and Educational Effort," *Education* (Educational Psychology Issue), November 1955.

⁴ L. C. Hirning, "Sound Trends and Appropriate Ambitions of the Counseling Movement," *Teachers College Record*, October 1944.

forts in schools, medical specialists must work in an educational and integrative way with representatives of other disciplines—nurses, dental hygienists, physical education teachers, sight conservationists, and so on—to achieve the objective of an optimum environment for healthy body development and freedom from the depredation of disease.

There is a temptation to draw further direct parallels between the functioning of a school psychiatric consultant and that of other student health personnel. Such comparison is only approximately possible, however, because of the rather complicated attitudes toward psychiatry which exist in the various communities and among school personnel. These attitudes have to be recognized and provided for in any school mental health program. Psychiatrists have been set apart from their medical colleagues not only by these complicated attitudes but by the nature of the work they have to do and the role they have to play in helping man face often unwelcome realities about himself. A considerable part of this article will deal with the ramifications of these complicated attitudes and the way they influence the functioning of a school psychiatrist.

School boards and school administrators who do not recognize this problem in making provisions for the psychiatrist's role may be limiting his potential usefulness even to the point of having his efforts canceled out, which may relegate him to a purely perfunctory role of a rubber stamp or at best merely a juggler of hot bricks.

SOME BASIC CONSIDERATIONS

Many psychiatrists do not have a clear idea what their potential role in a school setting can be, or they may fear it and consider the game not worth the candle.

Without at this point going into a discussion of the qualifications of a school psychiatrist, a few basic considerations may be mentioned.

Considerable preparation is necessary to equip a psychiatrist to function to his maximum usefulness in an educational setting, preparation not only—or even not particularly—in a formal sense but preparation predicated on the specialist's professional philosophy and the orientation of his thinking. That is to say, he must be convinced of the importance of what he is doing—that the game is worth the candle and that the psychiatric ills of mankind are not being solved and cannot be solved by psychotherapy alone. The emphasis of school psychiatry must be on prevention rather than treatment: on *how* a given problem developed or *how* a given situation arose rather than on merely finding a convenient label or disposition.

Furthermore, the psychiatrist must have some appreciation of the importance of going out to people not only in terms of a psychiatric cliché but in terms of a fundamental attitude toward his professional relation to human beings. If a psychiatrist feels that he will accept people professionally only as they come to him on his terms or in terms of his specific school of psychiatric thinking, he too will in all probability find his usefulness limited to a purely perfunctory and formalistic role.

It would seem that only by recognition of certain fundamentals by all concerned in the structuring of the position of school psychiatrist—school administrators and psychiatrists themselves—can the work of the school psychiatrist achieve its full possibilities in the field of preventive mental health.

As indicated above, for a psychiatrist to function in the field of prevention in

a school setting involves his working with people in other disciplines—with school administrators, teachers, psychologists, and guidance counselors. This functioning involves education of personnel and integration of their activities in ways that may be unfamiliar to them as well as to the school psychiatrist himself, who may find that he has much to learn.

We must keep in mind that educational psychiatry is a new field; any efforts in this area are pioneering efforts. When a psychiatrist is brought into a school situation with thoughts of an eventual comprehensive school mental hygiene program in mind, it is well for all concerned to realize that such a program can be achieved only through an interdisciplinary approach which will amount to a joint learning experience. The situation must be kept fluid and the pattern open for easy modification, enabling the psychiatrist to change his role as the situation requires.

PROPOSED QUALIFICATIONS

Before we proceed to more specific considerations regarding the optimum functioning of a school psychiatrist, we may well give some thought to the qualifications which he should bring to the situation.

Because educational psychiatry is such a new field and because the functions of a school psychiatrist still lie in a frontier area, it is important not to limit the qualifications of this specialist too narrowly. We can discuss them in general terms only, leaving the details to be settled by future experience. We have already mentioned some basic considerations relative to personality and basic professional philosophy. A word or two more needs to be added in this connection. Psychiatrists are so often looked to for ready-made

answers to difficult problems in human relations that they themselves sometimes fall victim to the attitude that they really have these answers. Sometimes they even succumb to the temptation to lend themselves as purveyors of panaceas. Popular literature abounds in pontifical stuff turned out by self-styled experts and experts who have turned mountebank. It is a pity that in the name of mental hygiene so many mental hygiene crimes are committed. People turn from one psychiatric mountebank to another, becoming more confused and ending up with cynicism about all mental hygiene efforts.

This may be strong language but it has important implications for our subject. School boards and school administrators should be on guard against mental health mountebanks, however "outstanding" they may seem to be. A school psychiatric consultant needs to have respect for various points of view in controversial issues, and humility about the cogency of his own formulations. School boards and school administrators will also do well to beware of psychiatrists who toss out elaborate theoretical psychoanalytic formulations without making the effort to adapt them to the needs of the situation. The uncritical and inappropriate offering of psychoanalytic formulations as a kind of hidden truth to which only the initiate have access is also a danger to be guarded against.

This warning should not be taken to mean any special reservation about psychoanalytic thinking in educational psychiatry. On the contrary, one of the qualifications of an effective school psychiatrist is a fundamental psychoanalytic orientation, not in any narrow sense but at least with an awareness of and an ability to discern unconscious motivations and an awareness of and a respect for the

power of emotions as well as the role played by family constellation factors in childhood.⁵ It was part of nineteenth century thinking and optimism that man conceived that his emotions were under rational control, and nineteenth century education was geared to this end. There was a time when it was believed (and by many it still is) that the truth was all we needed to know, and the truth would make us free. But it is becoming increasingly apparent that not only is the truth uncertain but the process of learning even the tentative truth which we can know is not a reasoned and well-ordered process and, above all, what man does with his knowledge depends so much on other than rational considerations.

Psychiatry has become increasingly aware of the importance of emotional reactions. Schopenhauer first pointed out, and Freud later established amid a welter of resistance and acrimony, that emotions dominate thinking and what appear to be rational processes and conclusions are fundamentally emotionally determined. Our educational procedures are still largely nineteenth century, and education has resisted the implications of what psychiatry has been finding out about the nature of man.⁶

It is thus that the underlying basis of *motivation* is still largely terra incognita for the educator.⁷ The more far-seeing are concerned about such problems as educational underachievement, reading disabilities in gifted children, poor attention span, and pupil apathy. Persistent student apathy in the face of increas-

ingly challenging curriculum material presents a major problem in curriculum development. The most challenging and interesting curriculum material will be presented to no avail if we can do no better than we have done with the vexing problem of motivation. No matter how much leading we do, we will have to learn how to make the horse drink. The school psychiatrist may be looked to for help in dealing with these and many similar problems. It is only the psychiatrist who has psychoanalytic thinking in his armamentarium of preparation for work in educational psychiatry who can hope to make a contribution to the solution of these problems.

Of course a thorough grounding in child psychiatry is essential, and this may involve more than psychoanalytic thinking. For instance, a poor attention span and pupil apathy are sometimes the result of unrecognized petit mal-like states revealed only by electroencephalographic studies.⁸

Child psychiatry cannot be learned from books and courses. It takes years of experience to develop awareness of the range of emotional problems of childhood and their ramifications. One must have followed some children in terms of a longitudinal section of their lives rather than merely in the cross section involved in a psychological diagnosis. And private practice of child psychiatry is not enough. Experience in a child guidance clinic in teamwork with psychiatric case workers and psychologists is a necessity.

The all-important awareness of the family as an emotionally dynamic factor in the child's life and the acquisition of skills in dealing with parental attitudes are of paramount importance for a school

⁵ Gerald H. J. Pearson, *Psychoanalysis and the Education of the Child* (New York, W. W. Norton & Co., 1954).

⁶ Goodwin Watson, "Psychoanalysis and the Future of Education," *Teachers College Record*, February 1957.

⁷ Percival M. Symonds, "What Education Has to Learn from Psychology: Motivation," *Teachers College Record*, February 1955.

⁸ "Jack Rapaport, The Psychopathology of Learning Difficulties," *New York State Journal of Medicine*, November 1957.

psychiatrist. School-parent relations like school-community relations is an area with which educators need help.

The school psychiatrist should be familiar with modern psychological testing, particularly with the scope and limitations of some of the projective techniques such as the Rorschach and the TAT. These tests, like the X-ray and laboratory tests in physical medicine, are important adjuncts to diagnosis and evaluation and need to be considered in the psychiatrist's efforts to build a total picture of the child's life. The field of counseling—its scope, aims, methodology, and limitations—should also be familiar to the school psychiatrist.⁹

A psychiatrist who aspires to work in the field of educational psychiatry should have an awareness of educational procedures and organization. He should have some familiarity with the teaching situation—teacher training, teaching standards, and teachers as human beings. Since the mental hygiene of teaching is such a recent area of mental hygiene concern, this experience is not easy to come by and may require special effort on the part of the educational psychiatrist.

In connection with educational organization, it behooves the school psychiatrist to have some knowledge of relevant medico-legal psychiatry, since there is such a large body of codified educational law which may affect what is possible and what is not possible in a given school situation.

Finally, the psychiatrist who aspires to render maximal service to the field of educational psychiatry should have had some experience in public education in psychiatry. He should have had experi-

ence in meeting with lay groups such as PTA's and mental hygiene organizations. This kind of experience teaches a psychiatrist receptiveness, flexibility, ways of dealing with groups and helping people develop their own awareness. He will also have to learn to deal with the kinds of rejecting attitudes toward psychiatry which are still so prevalent in our culture. These attitudes are part of man's disinclination to face reality about himself, and they will be encountered in school situations. The very fact that distorted and rejecting attitudes toward psychiatry are still so prevalent is an indication of a failure of education to deal with an important area in man's need to find his way in the modern complex world. There is something lacking here in the educators' armamentarium. Educators will have to be helped by educational psychiatrists to overcome these widespread rejecting attitudes so that psychiatry can help them deal with the great problem that has been neglected by education—man's understanding of himself.

Man, 2400 years after Socrates' admonition to "Know thyself," is still enough of a problem to himself that Einstein could say with great succinctness "Man's greatest problem is man."

Why is man such a great problem to himself? Perhaps the simplest answer is that man has certain blind spots, and resistances to facing realities about himself. These blind spots and resistances are emotionally determined and are, of course, largely unconscious. We may say that the emotions that cause the problems not only stand in the way of recognizing their part in causing the problems but often prevent awareness of the very existence of the problems. And the resistances are often manifested by the projection of hostility upon the one who points them up. It is not easy to formu-

⁹ L. C. Hirning, "Counseling Problems from the Psychiatrist's Point of View," *Journal of the National Association of Deans of Women*, October 1946.

late some of the more subtle ways a school psychiatrist may be useful in pointing out blind spots. (The word "subtle" is used advisedly.)

The school psychiatrist may not always be thanked for pointing up even by judicious questioning, emotional involvements in areas which are taken for granted or which may seem remote from any mental health considerations—remote ripples produced by apparently necessary expedients. The Socratic method may be useful but the psychiatrist should always be wary of a dose of hemlock headed his way.

This is the situation that faces the psychiatrist who aspires to become a school psychiatrist. Unless he is sensitive, unless he is nimble, unless he can be a familiar and friendly figure, he is in for stormy times which may end in his being relegated to a perfunctory role if, indeed, he can continue to function at all.

In summarizing the qualifications a psychiatrist must possess to function in the field of educational psychiatry, we must state first that not all psychiatrists are qualified by disposition or basic professional philosophy to function in schools. Second, since the field is so new, it is desirable not to limit the qualifications of the school psychiatrist too narrowly. However, certain qualifications of considerable importance need to be mentioned. These are: a basic psychoanalytic orientation, but not necessarily one completely identified with any one school of psychoanalytic thinking; a thorough grounding in child psychiatry and neurology with experience in a child guidance clinic using a team approach; a working knowledge of psychological tests and the field of counseling; familiarity with educational procedures and organizations; an understanding of teachers, their training, standards,

and reactions as human beings; a knowledge of medico-legal involvements; and finally, considerable experience in public education in mental hygiene.

OPERATION WITHIN THE SCHOOL ORGANIZATION

The writer has used the term "comprehensive school mental hygiene program" rather freely. It should be stated at this point that the full implications of all possibilities which are involved are in all likelihood greater than anything that can be blueprinted at this time. Such a blueprint must await the passage of time and the development of the field of educational psychiatry before all possibilities can be envisaged. However, in view of the kinds of functioning mentioned in the literature and the kinds of problems we can already delineate which involve education and schools in one way or another, a few suggestions as to possible functioning of a school psychiatrist may be offered.

To begin with, if we add to the relative scarcity of psychiatrists, the scarcity of these specialists who are equipped by interest and qualification to become educational psychiatrists, we come up with a very small figure indeed. Services of school psychiatrists will have to be carefully conserved to do the most good. In all likelihood, it will be many a day before more than the part-time services of a school psychiatrist will be available for any unit smaller than a school district, and that school district will need to have fairly well-organized pupil personnel services to make the best use of a psychiatric consultant.

In general, it is in many ways advisable for the school psychiatrist to be a consultant to staff and a coordinator of mental hygiene activities in the school with a well-organized pupil personnel services

staff rather than to work directly with children or families except under unusual circumstances. In the first place, the dangers of getting bogged down with a case load that is too heavy may impair his usefulness as a coordinator. Second, it is better for the staff to feel that he is primarily available for them. Third, he is less likely to be a threat to parents who may be afraid to have it known that their child was seen by a psychiatrist. While in the beginning he will in all likelihood work most closely with the school psychologist, his activities should not long be confined to more or less esoteric conferences with this specialist. Plans should be made to include almost at once guidance personnel and learning facilitation experts such as remedial reading teachers. Classroom teachers should also be included as soon as possible. This all-important inclusion of teachers may best be accomplished by setting up case conferences as a routine school procedure. This procedure will be discussed in detail below.

A further word needs to be said on the role of the school psychiatrist as the coordinator of school mental hygiene activities. How far this role can go depends to some extent on the amount of time the psychiatric consultant has to give to the school, but in large part on how well-rounded the school staff is in pupil personnel services. At the present writing, schools vary greatly in this regard. Most of them have school nurses who, in many instances, are made to function as attendance officers and become involved in problems of nonattendance which may be extremely complicated. This brings the school nurse face-to-face with a variety of family problems, and she may often find herself carrying the responsibilities of a psychiatric case worker or visiting teacher, along with manifold

health problems which her specialized education has trained her to handle.

Most schools have guidance counselors, and while the training of these counselors may be quite varied, they are an important part of pupil personnel services with which the school psychiatrist may expect to have close association. As mentioned above, familiarity with the field of counseling is important.

Many schools or school systems have school psychologists who are qualified to do psychometric and psychological testing and to an extent are equipped to make psychological evaluations of individual children. Since school psychologists are usually the leaders of school mental hygiene activities, school psychiatrists will tend to begin their activities in close collaboration with them. Although school psychologists have played a leading role in bringing evaluation of individual children into focus as an educational procedure, the genesis and dynamics of the child's emotional problems often remain obscure even after careful psychological evaluation, especially when these problems and blocks to learning may be rooted in family constellation factors affecting unconscious motivations. Here is where the school psychiatrist comes in. He, of course, will help erase the sharp distinction between "normal" and "abnormal" and help all concerned to understand that all children have emotional problems, some more handicapping than others. Sometimes it is not easy even for a psychiatrist to say when the difficult behavior or the block to learning represents normal or abnormal function. Fortunately it is rarely important to make this distinction in order to deal with the problem. However, the psychiatrist who is asked to evaluate a given behavior or developmental or learning problem in terms of dynamics involved may find

himself handicapped by a lack of the kind of information which he needs. This lack represents also an area which is largely undeveloped in educational circles, that of conceiving not only of the whole child but the *whole situation* in which a child has developed, in which he lives and reacts.

School-parent relationships, like school-community relationships, are in need of having new and better channels of communication developed. School-parent communication is so often one way: the teacher discusses the child with the parent. Few teachers are equipped to evaluate what parents communicate verbally and nonverbally about the emotional atmosphere and crosscurrents in the family and in parent attitudes toward educational effort. It is probably significant that this undeveloped area in educational circles is reflected in the relatively few school systems that have any psychiatric case worker or visiting teachers. It is precisely in this area that they are useful. And certainly the school psychiatrist who has to work without the family data and emotional intangibles which the psychiatric case worker is equipped to obtain is sorely handicapped.

Educational psychiatry may very well rise or fall with the availability of psychiatric case work data—a missing link in so much of educational effort. Because of their importance in a comprehensive school mental hygiene program, a few more words should be said about the functions of school psychiatric case workers (psychiatric social workers) or visiting teachers. They collect diagnostic and functionally significant family data to help make the diagnostic studies of the psychologist dynamically meaningful and useful for psychiatric evaluation. They help evaluate the emotional crosscurrents in the family and the total situa-

tion in which the child lives. Psychiatric case workers can aid in interpreting the results of psychological evaluation to parents and, in turn, interpret to the teacher in educationally meaningful terms the parents' reactions to these evaluations.¹⁰

Furthermore, psychiatric case workers can be looked to for a working knowledge of community resources upon which parents and schools may need to rely more and more. This kind of knowledge may be essential where a child's troubles are found to require psychotherapy or even exclusion from school.

Troubled children usually have troubled parents. It is ordinarily not enough to give these parents mere lists of such community agencies as may happen to come to the attention of someone not specifically trained to know them and evaluate them. The journey from school office to community resource (clinic, private psychiatrist, social agency, or special school) may be a short one in terms of city blocks, but a long one in terms of emotional blocks. Families often need a sustained relationship to help make connections with the indicated resource, and the psychiatric case worker can be of immeasurable help here. And likewise a teacher may need a sustained and sustaining relationship with someone in the school who can help her understand the child in terms of the total situation which may have been first discussed with the teacher in case conference. As the year proceeds, new problems may arise in the child—certain changes in the original situation will be seen—and the alert teacher will want to turn to someone for continued help in carrying through the plans which were worked out in case confer-

¹⁰ John R. Altmeyer, M.D., "Public School Services for the Child with Emotional Problems," *Social Work* (School Social Work Section), April 1956.

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ence. The changes in the situation may need to be brought into relationship to data obtained by the psychiatric case worker for a follow-up case conference.

If the school psychiatrist lacks the help of a school psychiatric social worker, he may find himself under great pressure to play such a role himself in order to get the kind of data he needs and to deal with the kind of parental reactions which are so significant in evaluating and handling a child's school problem. The handling of such reactions and dealing with them constructively come under the concept of "work with parents," which is a relatively undeveloped area in school procedure.¹¹

Indeed, incongruous situations all too frequently arise in which there are re-criminations between parents and teachers, with each blaming the other for the child's emotional difficulties. The school psychiatrist, with the help of the psychiatric case worker, may be able to help both recognize the part each has played in the child's life as well as the difficulties with which each has to contend. Thus, parents and teachers can be helped to recognize the existence of problems for which neither or both are responsible. By such mutual recognition, tensions may be lessened and the real focus of interest—the child—be re-established.

The school psychiatrist will need to confer with his medical colleagues, the school physician and the family physician, to evaluate the relation of the child's physical health to his school adjustment and learning problems and interpret these physical factors to other members of the pupil personnel services staff.

Inclusion of special school services such as remedial reading and speech therapy

¹¹ Sandra D. Arbit, "Working with Parents," *Social Work* (School Social Work Section), July 1956.

as part of a comprehensive mental hygiene program will need the integrative and coordinating functions of the school psychiatrist.

The curriculum coordinator, whose job is to enrich the curriculum and to adjust its presentation to the needs and abilities of the individual children, will from time to time play an important role in any comprehensive school mental health program which aims at dealing with the emotional problems of children as they affect not only behavior but also motivation and learning ability. The problems of making curriculum more meaningful to children are pertinent here. Problems related to bringing curriculum material with mental health implications particularly into social studies, English and science programs are involved. The relative lag in interest in science among our high school students is a psycho-socioeconomic problem to the solution of which psychiatry may be able to make an important and timely contribution. What becomes of the inquiring state of mind as the child passes from pre-adolescence to adolescence? How can the presentation of our science curriculum deal with this problem? These are questions with which a comprehensive school mental hygiene program may need to deal.

There is growing recognition of the importance of adding to the curriculum courses with actual mental health content, such as a course in teen-age problems, human relations classes¹² and, in some very modern schools, classes in preparation for some of the age-old but perennial problematic human enterprises such as marriage, parenthood and family

¹² Committee on Preventive Psychiatry, "Promotion of Mental Hygiene in Primary and Secondary Schools, An Evaluation of Four Projects." Group for the Advancement of Psychiatry, Report #18, January 1951.

living are being tried out. Their general acceptance may be just around the corner as we become aware that the traditional curriculum is falling far short of preparing children to live in the complex and precarious world of modern times. A school psychiatrist may be of help in gaining acceptance for such curriculum changes and in implementing them.

Having indicated the roles of some of the members of the psychological services or pupil personnel services staff, we are in a position to consider how the school psychiatrist can work with them as a leader and coordinator of their activities. He is one who by training should be equipped to coordinate their activities and bring them together, functioning as a team, and he should be expected to use his training in this way.

The missing members of the team are of course the classroom teachers. They have been left to the end of this discussion of pupil personnel services, not because they are considered to have a secondary or peripheral role but on the contrary because of their great importance in the center and on the front line of any mental health endeavor—for which they deserve special consideration. While their activities in this area are best coordinated through the case conference procedure which will be outlined below, they must have direct and easy access to the school psychiatrist. Ways will have to be found to implement this access. The importance of the psychiatrist's being a familiar, friendly, non-threatening figure is basic in this connection.¹³

The mental hygiene of teaching and the personal adjustment of teachers are much-neglected areas of educational ef-

fort. At present they are being handled largely on a hit-and-miss basis, with some enlightened teachers making surreptitious visits to the psychiatrist in his private office, but with the vast majority of teachers not daring to go near anyone with a psychiatric title. Ways must be found to deal with teachers' fears and anxieties, guilts and hostilities, intelligently and constructively. Self-appraisal will need to be brought more and more into educational procedure. As Leon Mones states, questions of curriculum, teaching method, and organizational techniques are to be considered not in terms of problems in instructional efficiency but as patterns of human personality in action.¹⁴ This subject has also been dealt with in two excellent papers, one by Leo Berman,¹⁵ and one by Peter Bloss.¹⁶

CASE CONFERENCE TECHNIQUE

The chief *modus operandi* for the school psychiatrist will in all likelihood be the case conference in which teachers are integral members. There will be no handing a problem to a so-called expert and sitting back while he performs a few minor miracles once in a while.

The school psychiatrist who aspires to act as a coordinator of school mental hygiene activities will need to develop the concept of case conference teamwork as an interdisciplinary approach to interpersonal problems. *Whenever a group of school staff members sit down to discuss the problems of an individual child in case conference, they will feel themselves to be responsible and participating members of a team whose functions interdig-*

¹⁴ Mones, *op. cit.*

¹⁵ Leo Berman, "Mental Health of the Educator," *Mental Hygiene*, Vol. 38, 1954.

¹⁶ Peter Bloss, "Aspects of Mental Health in Teaching and Learning," *Mental Hygiene*, October 1953.

¹³ Ruth Strang, "Many-sided Aspects of Mental Health," *Mental Health in Modern Education*. Fifty-fourth Yearbook of the National Society for the Study of Education, 1955.

tate. Dr. Osborne uses the term case conference "committee."¹⁷ If we wish to hark back to the traditional clinic team concept of psychologist, psychiatric social worker and psychiatrist, we can think of these in a school setting in football terms as the backfield. But the backfield cannot go far without the active participation of the rest of the team.

Above all, when a teacher has free and easy access to the psychiatrist or to case conference, she can be given the feeling that *she is not alone*, but can and should work with other members of the team in dealing with the emotional problems of a given child who is troubling her.

The process of bringing such a child's problems to case conference may vary with the local situation. Where the school psychiatrist is indeed a familiar and friendly figure and has the time, it may be on occasion arranged through him, thus giving him a chance to have individual contact with the teacher; or it may be arranged through a school administrator, school psychologist, school psychiatric case worker, school nurse or whoever may play an executive role in charge of scheduling case conferences and their agenda.

All members of the case conference team or committee will need to be made more aware of clinical procedure, at least in recognizing that the case conference is more than an informal talking over of a child's problem, as at the lunch table. Although the composition of the case conference will differ from time to time, it can be made a formally structured and organized procedure which is held at regular and stated intervals.

The initial referring to case conference

may be made quite informal to facilitate separating out the cases requiring only a brief review of the presenting problem and brief comment by one or more members of the conference (possibly other teachers) to help put the problem into its proper framework. If, with the help of the school psychiatrist, it is decided that more intensive consideration is needed, he himself can help outline a plan of approach and ask to have the case scheduled again, at which time it can be dealt with more formally and comprehensively, with further scheduling and widening of the scope of investigation as may seem indicated.

In bringing children's problems to case conference, teachers can be helped to understand their role in the situation: whether it is something that they can and should handle and how or whether intervention may be necessary, when and what kind, and what else needs to be known about the problem before its nature can be understood and an approach formulated. Thus the kinds of information that are needed to understand behavior in general and the development of the presenting problem may be highlighted by the school psychiatrist. In this connection as well as others, an important function of the case conference lies in the use of case material to further the mental hygiene awareness and psychiatric insights of the staff. Some old pedagogical clichés may be brought under new scrutiny and re-evaluated.

In case conference, teachers will learn to understand better the roles and functions of other members of the case conference team in connection with the particular case being considered and with the building of this total picture.

In the experience of this author, a very important aspect of clinical procedure which needs to be brought into a school

¹⁷ Maurice M. Osborne, Jr., "High School Health Service Problems as the School Doctor Sees Them," *American Journal of Public Health*, October 1957.

setting is that kind of clinical awareness which we may designate rather clumsily as "confidentiality consciousness." This apparent refinement has far-reaching consequences. Deficiency in this area is attested to by the fear that pupil personnel service staff have of sharing certain confidential material with teachers, the fear that teachers have of one another in this connection, and the concern that school administrators have with regard to members of their staffs. But most hampering of all is the fear that parents have of letting school personnel in on any of their personal problems.

We need not elaborate on the far-reaching consequences of this state of affairs. Judgmental attitudes are of course largely to blame and these may take years to change. But a most important first step is the inculcation of "confidentially consciousness" into pupil personnel procedures. This does not mean maintaining a clam-like silence with reference to free case conference discussions, meanwhile discussing confidential material across lunch tables and in other public places because some tidbits cannot be resisted. It means developing an awareness of the proper and constructive use of confidential material in a serious, clinically oriented case conference. "Confidentiality consciousness" may be compared to the aseptic consciousness or conscience which members of an operating room team have to acquire in learning to move about among sterile and unsterile material, going about their tasks, meanwhile safeguarding the sterility of sterile materials. So school personnel will need to learn to work with confidential material. They must learn how it is handled and under what circumstances constructive use may be made of it and confidentiality safeguarded at the same time.

Under the guidance of the school psy-

chiatrist, with his background of clinical experience, school personnel will learn that in making certain communications the communicator asks himself, at first deliberately and later by intuitive process, Does this communication have a constructive purpose? Where will it go from here? What will happen if there's a leak?

When this clinical awareness has become an ingrained part of school procedure (and with some improvements in the area of avoiding making value judgments, another clinical attitude which we hope may come in time), school personnel may find that a new world of dynamic human material is open to them which may go far toward helping them obtain answers to some of their most persistent questions.

In addition to regular case conferences, the school psychiatrist can conduct staff sessions in a seminar manner on general school mental hygiene problems. These seminar sessions can be scheduled when a demand for them arises. They should be scheduled in pairs, the first session being devoted to a clarification of the problems as presented and assignments given out for exploration and development of the subject. The second session should be held after a sufficient interval to allow due thought and preparation.

EDUCATIONAL PSYCHIATRY: MAN'S SELF-AWARENESS

As time goes on, school psychiatrists who have a great deal to learn in working with educators may also find new vistas opening to them. For instance, educators have more opportunity for future planning than do psychiatrists, nurses, and social workers. We are always at least one hop behind in our efforts to cope with problems as they come up, always picking up the pieces. In working with educators, we may be stimulated to

participate in planning for the future and put some real preventive mental hygiene measures into action. In such discussions, the psychiatrist may sometimes be limited to asking questions for which he has as yet no answers. But others may have answers which they have been unable to formulate because no one was brash enough to ask the questions for which they had answers without realizing it.

The school psychiatrist may be of help to the administrators in solving problems with the sometimes vexing teacher-administrator involvements and in evaluating the mental hygiene implications of organizational stand-bys and traditional procedures. This is an area into which the school psychiatrist may have to feel his way carefully in order to be thought of as a helping colleague rather than as a threat or a plain nuisance.

The school psychiatrist should be prepared to help educators deal with the vexing problem of school-community interrelations which sometimes become explosive, setting educational progress back for years.

The individual school psychiatrist should try his best to avoid having any failure on his part (and such failure may come even with the best qualified of school psychiatrists) interpreted as a failure of psychiatry as a discipline, so that it is not said after he is gone, "Well, we tried psychiatry and it didn't work." The community may not be ready for what

he is trying to do and, however gradual his approach, he may find himself thrown to the wolves. He must be prepared to take this philosophically and be concerned only that the tossing does as little harm to the cause he is serving as may be possible under the circumstances.

He may find that people talk glibly of a preventive program, but when it dawns on them what this may entail in terms of changes in attitudes and value judgments, re-examining traditional, time-honored educational shibboleths, or possibly giving up some comfortable old procedures, they may decide that they don't want mental hygiene *that* much, and had rather go back to the good old ostrich days.

The development of the field of educational psychiatry may raise new hope for coping with some of the persistent problems in education and human relations. To some extent the hope of the world may lie in the development of this new field in which so many of us have so much to learn.

The admonition of Socrates, "Know thyself," may finally, after some 2400 years, be coming to realization in educational terms. Man's knowledge of himself may finally be recognized as a competent subject for educational interest and effort, and there is the hope that it will soon be recognized that education cannot achieve its goals without exerting interest and effort in this direction.

Health Education Aspects of School Health Services*

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THE health services program in public schools is a specialized part of a comprehensive program of community health. In some instances the school health program is a responsibility of the board of education, and this body employs health specialists—physicians, nurses, dentists, and dental hygienists—to conduct the program. In other instances the school health services program is a function of the official health agency (board of health). When this is the case, a special division for this program may be organized within the department of health or the work may be the responsibility of the existing division of maternal and child health. This arrangement is commonly used in larger cities. Although the primary purpose of the school health services department is not stated to be educational, there is an excellent opportunity for health specialists to make an educational contribution to the school's program. This opportunity exists whether the program is administered by the board of education or by the board of health.

Certain restrictions in connection with school health services, that is, diagnosis,

prescription, and medical care by the physician, are imposed by generally accepted policy in the school health field. The provision of medical and dental treatment is not considered a responsibility of a school health department. However, there are no such comparable restrictions by policy in the area of health education. Inefficiently functioning personnel, inadequate arrangements, and poor facilities for conducting an educational program are usually the only limitations in the educational aspects of school health services.

Traditionally, school health services were concerned mainly with the prevention of childhood communicable diseases. Today, school health services exist because of: "(1) their contribution to the realization of educational aims, (2) the necessity to minimize the hazards of school attendance, (3) the importance of adapting school health programs to individual capacities and needs, (4) the utilization of the schools as a community center, (5) the potential educational values inherent in health services activities." [4]* A casual inspection of the reasons above for the existence of a school health services program indicates the

* Professor Walker is the author of *Health in the Elementary School* (Ronald Press). He is a Fellow in the American Public Health Association.

* Numbers in brackets apply to References on pages 229-30.

emphasis placed on the educational aspects of this work.

In connection with the classroom teaching program, the health services program of the school receives substantial emphasis in the development of planned experiences, in the utilization of incidental teaching opportunities, and in the arrangement of large teaching units. When such emphasis exists, the health examination, the dental inspection, and the inspections by the nurse and the teacher become significant for the pupil. He gains an understanding of these procedures when they are associated with the teaching program and when his part in them is not merely passive.

Understandings and desirable behavior are the characteristic outcomes of an effective program. The techniques which are used by the teacher in her classroom work and by the health specialist in his incidental teaching should produce critical thinking and understanding appropriate to the grade level of the pupil. Utilization of health services in the teaching program brings real problems to the attention of pupils. Some are problems of personal health and are associated with the needs of the individual; others are problems of public health and are associated with the individual's understanding of community needs.

With the exception of instances in which the school nurse and the dental hygienist actually engage in classroom teaching, the health education efforts of the health specialist are associated directly with the services he performs. The teaching that he does is considered incidental to the primary job of supplying health services and is carried on informally.

The distinction between the health services aspect of the health specialists' work and health education is not easily

made. For example, the school physician makes health appraisals of school pupils. This is one of the important parts of his work. However, he does not furnish a specific diagnosis nor does he prescribe specific remedial care for the pupils whom he examines and finds in need of such care. If the parent is present at the examination of his elementary school child, the findings of the examination are discussed with him and general recommendations are made about preventive care or about the care of remediable defects. The actual medical services on a physician-patient basis or those obtained from an agency source are usually arranged by the parent. The work of the physician in this instance begins with a review of the case history and with an examination as the first steps in the health appraisal of the child. The consultation with the parent by the school physician and the home visit by the nurse for the purpose of giving information and making recommendations about the child to the parent who was not present at the examination are attempts by health specialists to persuade parents toward desirable action. The major aspect of these procedures is referred to usually as health service. It is quite clear, however, that what started as a service rapidly acquired guidance features generally associated with a distinctly educational procedure.

TEACHING-LEARNING SITUATION

If it is to be successful, the educational aspect of the health services program must contain the same elements present in every well-planned teaching-learning situation. The pupil's understanding of his health problems and of the kinds of behavior necessary for their solution depends mainly on the extent to which he is motivated by a personal need that he

recognizes. He must be aware that the activity in which he takes part is purposeful and important to him. The health specialist, on the other hand, must meet the demands of the health services department. This department establishes certain standards of work output; for example, a certain number of examinations per hour. It is difficult to believe that this demand has anything in common with the personal needs of the child. It would be less difficult to see the value in an examination if the primary purpose of the health specialist and that of the child were more harmonious. Pre-examination demonstration and post-examination discussion by specialist and teacher make possible a situation in which the pupil does not play a purely passive role but is able to grasp the meaning of the examination as it applies to him.

The not uncommon practice of complete dissociation of the health services program of the school and the health instruction program, or the failure on the part of the health specialist to utilize opportunities for incidental teaching cannot but deprive the pupil of a background of relevant experiences which are necessary for an understanding that is basic to the making of intelligent choices. A pupil whose understanding of childhood communicable disease has been limited to the experience of having such a disease and to the restrictions of exclusion from school that apply to that particular disease is not in a position to understand the procedures of communicable disease control merely because of these experiences. There is a better prospect of recognizing his and the school's responsibility when relevant experiences are possible through health instruction. In order to deal intelligently with present and future problems which involve exposure of self or protection of others,

relevant experience through direct or incidental teaching which is associated with transmissible disease is necessary. Out of this come understanding and a desirable type of behavior.

HEALTH SERVICES AND CLASSROOM TEACHING

Understanding of health problems and of the behavior required for their solution calls for attention to the significant aspects of a situation. In his choice of foods, for example, a child is urged to follow a general plan when he has the opportunity to do so. The general dietary plan is a composite of many recognized dietary needs. If his attention is focused on particular aspects of the problem of nutrition, the general plan has meaning for him. He is able to see relationships more clearly and to identify those that are cause-and-effect in nature. Numerous opportunities are afforded the physician and the nurse for teaching the practical aspects of nutrition as they carry out procedures associated with the physical growth and development of children.

Knowledge about personal and community health matters is increased as the pupil has opportunity to discuss and to write about his experiences and is encouraged to do so. The teacher's role is mainly to keep in focus the significant elements of the experience in order that desirable understandings may result. The responsibility for this type of pupil experience rests with the teacher and not with members of the health services department. However, coordination of activity between these groups as a result of cooperation between individuals is necessary. Discussions about or a demonstration of the medical and dental examination prior to the time each is given and participation of the health specialist in these procedures are desirable and en-

lightening experiences for the child. Similarly, post-examination classroom discussion and writing about the significant elements of the experience afford an opportunity for further comprehension of the examination.

Active participation by the pupil in a procedure designed to be of educational value is necessary for adequate understanding. Too often the pupil plays a completely passive role in the procedures carried out by the health service staff members. The opportunity for "personal discovery" by the pupil may not be so great here as in some aspects of his daily school program, but the opportunity for inquiry is present if the situation is properly arranged. The pupil's active participation is limited practically to questions directed at the person responsible for the examination or the inspection. The climate during the experience must be such that the child is encouraged to ask questions. Pre-examination discussion in the classroom by health service specialists can help to promote the desired relationship between child and examiner. Other necessary ingredients, if the examination or the inspection is to have educational worth, are an understanding by the health specialist of his role as an educator when he is working in a school situation and skill on his part in dealing with the child. Heavy school schedules of health service responsibilities which are carried by some health specialists do not encourage attention to the more distinctly educational aspects of their work. However, if the basic purposes of all health programs in school are met, there is need for more emphasis on the educational aspects of health services.

The health services program has limitations on the extent to which a pupil may participate actively in planning certain parts of the program and in evaluating it.

However, the examination and the inspection of a pupil by a health specialist are merely starting points and are followed by intensive preventive or corrective procedure whenever such procedure is called for. In this aspect of the services program the pupil can and not uncommonly does take part in the planning and the evaluating. At the level of his understanding and of his responsibility to act he may even be instrumental in the correction of certain remediable defects. In some localities, for example, opportunity is made for the correction of certain kinds of dental defects at low cost or without cost to the individual. If he wishes to do so, the pupil can participate actively in the follow-up aspects of a dental health program by availing himself of this service. Furthermore, he is in a position to evaluate the end results of his own part in the program and to understand the consequences of the choice he makes. In order that this experience may have its maximum educational effect, the choice by the pupil must be free of force and of fear.

PUPIL ATTITUDES

The importance of an informal and congenial atmosphere when a child is examined by the physician and the dentist or inspected by the nurse has been mentioned in connection with pupil discussion of their health problems. The influence of this climate extends beyond the immediate goal of supplying one of the required elements in the teaching-learning situation. It has a comparatively remote effect on the health education of the individual. The experiences which the child has with representatives of the health services department determine in large measure *how he feels* about the professions represented and how he will continue to feel for some time to come. His

attitudes toward medical, nursing, and dental care are the result of an accretion of experiences with representatives of the professions concerned. If these attitudes are to be the desirable variety, it is necessary that the health services specialist understand his role in health guidance and be prepared to assume that role. The pupil should be recognized as a personality, and his individual needs, as they lie in the broad province of personal health, should be clearly understood. When he helps the pupil to meet these needs, the highest type of technical service and professional responsibility is called for from the health services specialist. This is important because the maintenance of health in both early and later years, which is in part dependent on preventive care available from private practitioners, requires a periodic inventory of health assets of young and old alike and a continuing relationship between patient and practitioner. The extent to which this relationship prevails depends on how an individual feels about the service rendered by the practitioner. Possibly no greater educational service can be rendered by the health specialist than creating an atmosphere which favorably influences the feelings of school pupils toward him and the service he represents.

ORGANIZATION FOR COORDINATION

The interdependence of health services and health education is well known by those who are familiar with either. It is difficult to indicate where one stops and the other begins. Overlapping seems to be common where these two aspects of a school health program are well organized. This situation calls for special attention to the structural organization of each aspect within the school system and to carefully developed plans for coordi-

nated activity, particularly at the school level, between the health services specialists and other members of the school staff who are concerned directly with the health problems of pupils. The problem of coordination is usually more acute in the secondary school and in the departmentalized grades of the elementary school.

Ordinarily, health problems of pupils and other problems which require the attention of school personnel are cared for by the school principal, a guidance counselor, a teacher, or a member of the school's health services department staff. Osborne calls attention to the following deficiencies in pupil referral practice. These deficiencies, he suggests, are present in many secondary school situations: "(1) lack of communication; (2) lack of adequate information on which to evaluate problems, with subsequent misinterpretation; (3) rigidity in one area coupled with haphazard referral in another; and (4) lack of deliberate planning and definition of responsibility for the handling of problems." [2]

The final determination of the method for dealing with health problems of pupils is influenced by the policies and the practices of administration of the individual school principal. Of significance to the health specialist and of maximum concern to the child in need of health guidance is a procedure approved by the school principal which recognizes the potential educational contribution of the health specialist and identifies him directly with the broad educational program of the school. Herein lies one of the keys to effective health education by members of the school health services department.

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General Administration and School Health Services*

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The maintenance of sound health is one of the most important objectives of all education.—CURRICULUM GUIDE, San Diego City Schools

THE most productive environment for a healthy, developing, inquisitive mind is a healthy and sound body. That health education must be assigned an important place in the school program is universally accepted in today's schools. The concept that successful learning goes hand in hand with good health is unchallenged.

Health education traditionally is found as a part of a larger whole—health services. Moreover, such services are not necessarily restricted to children but may be available to staff members also, at least to a limited degree. Ideally, health services will be utilized to strengthen health instruction; it amounts to no more than assisting the educational process by practical application.

The San Diego City Schools' point of view toward health education, as de-

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scribed in the *Curriculum Guide*, certainly is not uncommon. It stresses that health education is concerned not only with physical but also mental and emotional health. It sees health education as related to all areas of the curriculum. It holds that each teacher has the responsibility of furthering health education at all times in the daily living in the classroom. Effectiveness of the program is measured by the amount of desirable change in health behavior.

RESPONSIBILITY OF GENERAL ADMINISTRATION

A major responsibility of general administration in any school district is the coordination of the specialized functions which make up the district's total program. One of those functions is health services.

In the development of the health services program, the general administrator must assume leadership in making certain decisions which will determine the framework within which the program will operate. Administration's principal responsibilities are: (1) determination of

certain types of cases may be referred to public or volunteer health agencies for attention. If neither private nor community agency attention is available, the school clinics provide necessary services. In some instances, diagnoses are made by the school clinics prior to referral to private or community agency attention.

Cooperation with Community Health Agencies. Administration has an important responsibility in evaluating the total health resources of the community to the end that the school health program may present a practical and efficient working relationship with community agencies. School health services will have to be expanded or curtailed according to the adequacy or inadequacy of services available through community agencies. Establishment of efficient working relationships with public health departments, where they exist, is a must in the interest of good stewardship of public funds. Overlapping services should not be tolerated.

This suggests the problem of responsibility for immunization programs. Again, as in general health care, the philosophy in San Diego is that first responsibility belongs to the family and its private physician. But the welfare of children not immunized through private care against tetanus, whooping cough, diphtheria, and smallpox is protected by the cooperative efforts of the San Diego Department of Public Health and the schools. Public Health furnishes the doctors and the vaccines; the schools cooperate by making available physical facilities and the services of nurses.

Cooperative effort was demonstrated on a comprehensive scale several years ago, when San Diego's school system became the first in the world to conduct a mass immunization program with the new Salk polio vaccine. In this instance

the Public Health Department supplied the initiative and obtained the vaccine which enabled San Diego to become the first major test center; the County Medical Society supplied the scores of doctors; and the schools supplied the facilities and the services of nurses and teachers necessary to inoculate thousands of primary grade youngsters in only several hours.

Service to Other School Departments. Another important responsibility of administration in defining the total scope of the health services program is to determine the nature and extent of services to be made available to other departments of the school district. San Diego's philosophy in this respect—namely, that services to other departments constitute a major function of the Health Education Department—probably is common to most districts, certainly the larger ones.

It is natural that in San Diego the greatest service is provided for the Child Guidance Department, since the latter is responsible for an extensive program serving the physically handicapped. Thus the vision testing and hearing testing programs conducted by the Health Education Department have a direct relationship to the vision conservation and hearing conservation classes administered by the Guidance Department.

All school children are given a battery of five vision tests by school nurses. All children showing vision defects are referred either to private physicians or to the district eye clinic, depending upon circumstances. All pupils assigned to segregated sight-saving classes are placed through the eye clinic.

Similarly, audiometrists attached to the central clinic staff give hearing tests to all children, and those with established or possible hearing defects are referred either to private physicians through the

families or to the district otology clinic. Children with hearing losses so serious that they cannot participate successfully with normal children are placed either in classes for the hard of hearing or in those for the aural deaf. Children with less severe hearing handicaps remain in regular classes but are given special lip-reading instruction.

In the same manner, all children assigned to classes for the orthopedically handicapped are placed only after examination and study by specialists in the district clinic.

Other services extended by the Health Education Department include: physical examination, by a special medical board, of all third-year probationary teachers prior to the granting of tenure; review of medical forms submitted by all candidates for employment; physical examination of all bus drivers and cafeteria workers; examination of Child Care Center enrollees (a state-financed, district-operated program); counseling with employees absent because of illness for thirty or more days; and cooperation with the Physical Education Department in coordinating the physical education program, including adapted (corrective) physical education.

Check List of Health Services. Some indication of the scope of a comprehensive health services program may be obtained from the following list of activities and services incorporated in the program of the San Diego City Schools.

HEALTH EDUCATION

Health Education Steering Committee

Review and development of health curriculum

Integration of health curriculum into total program through Curriculum Guide

Selection and recommendation of health textbooks

Special Teaching Assignments

Social hygiene lessons and group guidance

Health units in junior high school physical education classes

Adapted physical education classes (junior high schools)

School Nurses' Assignments

Service on school health councils

Junior Health Patrol lessons

First aid courses for school employees

Teacher conferences regarding health status of pupils

Parent conferences regarding health status of pupils

Individualized health counseling

Service as resource persons—providing health materials, speaking to classes, etc.

Central Office Services

In-service training through staff conferences

Development of audio-visual aids (kits, etc.)

Development of health bulletins for teachers

Special educational services prior to immunization and examination by doctors, dental hygienists, audiometrists, etc.

HEALTH SERVICES

Through Central Office Staff

Medical clinic examinations

Vision and hearing testing

Referral of pupils to clinics and community health agencies

Medical Board examinations (third-year probationary teachers)

Through Nurses

Regular health inspection of pupils

Health inspection of pupils prior to school camp trips

Emergency care of sick and injured children

Readmission of pupils following illness

Follow-through on results of medical examinations, vision and hearing tests, and school health problems

Referrals for welfare lunches and free milk program

Weighing and measuring pupils

Assistance to examining physicians

Maintenance of cumulative health records

Training of health monitors

Assistance in immunization procedures

Referral of pupils to clinics and community health agencies

Referral of needy pupils for shoes, clothing, Christmas Bureau listing.

PROVIDING FACILITIES FOR HEALTH SERVICES

The scope and organization of a health services program may be set down on paper in guides, manuals, and rules and regulations. These become something of a blueprint, development of which is clearly an administrative function. But two other factors enter into the successful operation of the program: adequate physical facilities must be provided, and qualified personnel must be selected and assigned. These too are responsibilities of administration.

Regarding the problem of physical facilities, the administrator will recognize three areas of concern: What can be done to insure a suitable general environment for healthful living and learning experiences? What type of specific health facility should be provided for each school building? What kinds of centralized facilities, including clinical, are required to serve the program?

Earlier in this discussion it was suggested that health education should be related to all areas of the curriculum. This would mean that the whole school building would become a classroom for health instruction. It follows, then, that the environment itself would be involved in the process of learning correct health attitudes and practices.

If the school building meets good heating, ventilation, lighting, and safety standards, not only are healthful living practices being taught by environment but the maintenance of good health itself is being encouraged.

But there is a further need. Since the school nurse is concerned with specialized health activities and services, she cannot be expected to operate efficiently

without adequate specialized facilities and equipment for examination, observation, and minimum care of emergency cases.

Planning for School Facilities. The requirements described dictate logical procedures for the administrator. As he enters into schoolhouse planning, he should do all in his power to insure that financing is adequate to provide the correct elements of environment as they are related to heating, ventilation, lighting, and safety, and that architectural plans do, in fact, provide for such inclusions.

The administrator should also accept responsibility for the development, in cooperation with health experts, of plans for a health services area designed to meet the program's specific needs. Once suitable plans have been worked out, they should be incorporated as a standardized feature in the contract for every new school building.

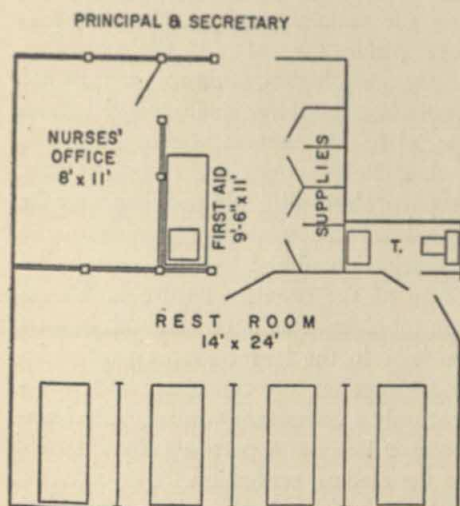
The nature of the health services program, including emergency care of the ill and the injured, accessibility to records, and convenient contact with administrators, teachers, and parents, indicates that the health suite or office should be a part of the school's administrative unit.

San Diego has standardized two health suites—one for elementary and one for secondary schools. (See Figures 1 and 2.) Located adjacent to the offices of the principal and school secretary, the elementary suite includes an office for the nurse, a first aid station, a small waiting area, supply cabinets, a toilet, and a rest room with a minimum of four cots and screens where pupils may be detailed for rest, observation, or emergency treatment pending arrival of parents or a doctor.

Secondary school health suites provide the same basic facilities except that two rest rooms, each with a toilet, are sup-

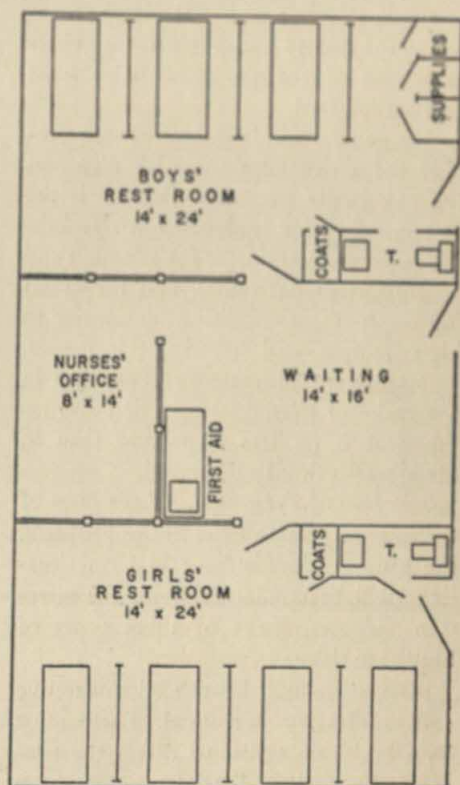
plied, one for boys and one for girls.

Planning for Centralized Facilities. For school districts with central administration buildings, the nature and size of health facilities, if any, will depend upon several factors. These include the number of administrative personnel, whether or not physical and clinical examinations are carried on in the schools or in community health agencies rather than in district central facilities, and whether or not there is need for office space for health specialists.



HEALTH SUITE

SAN DIEGO UNIFIED SCHOOL
DISTRICT
ELEMENTARY SCHOOL
HEALTH EDUCATION



HEALTH SUITE

SAN DIEGO UNIFIED SCHOOL
DISTRICT
SECONDARY SCHOOL
HEALTH EDUCATION

When San Diego built its new Education Center in 1952, generous space was allocated for health offices and clinics. These facilities were located on the ground floor of a three-story building to make them easily accessible to the public, particularly parents bringing small children to the clinics.

Housed here in close proximity to all other central administrative facilities are medical clinics, a dental clinic, a sound-proofed room for audiometry, work space for development of health education materials, and offices for the director, supervising nurse, clinic coordinator, audiologist, dental assistant, and secretaries. Desks are provided for examining physicians, dental hygienists, audiometrists, and social hygiene counselors.

STAFFING THE HEALTH PROGRAM

In the final analysis, the effectiveness of any educational program depends upon people. The program will be strong or weak, effective or ineffective, according to the quality and performance characteristics of the personnel who must carry it forward.

The general administrator cannot provide the active administrative direction for any single program. But his is the responsibility for leadership in establishing personnel standards, for selection and assignment of personnel, and for creating employment conditions conducive to high morale and good performance. Therefore his ultimate responsibility in the realm of personnel selection and assignment is no less important than in the areas previously discussed.

Selection of Personnel. Regardless of the size and scope of the health program, the general administrator in most situations will be concerned with the selection and assignment of three types of health specialists.

First, there will be the administrative and supervisory personnel. There must be a health specialist to direct the program. In smaller districts it may be a Public Health nurse employed full-time or part-time, or a physician employed on a part-time or consultant basis; in larger districts it is more likely to be a full-time physician-administrator. Whether there will be other supervisory workers will depend upon the size of the district and scope of the program.

Second, there will be a need for examining physicians and dentists. Whether they are employed on a contractual basis, an hourly basis, or by contractual agreement with other public or community health agencies will depend again upon

the factors of size of district and scope of program.

Finally, there will be the need for the specialized health workers who form the real backbone of the program—the nurses, technicians, and special teachers who have major responsibility for carrying out instructional aspects of the program as well as many of the service aspects.

In the program as operated in San Diego, the Director of Health Education, supervising nurse, and clinic coordinator fall within the first category of specialists; the examining physicians and dentists within the second; the corps of nurses, audiologists, audiometrists, dental hygienists, social hygiene counselors, and special health teachers within the third.

Staff Relationships and Compensation. A particularly difficult problem may be posed for the general administrator in the selection of the health director. Because of the peculiar nature of his responsibilities, the latter should be—especially in the larger systems maintaining programs of considerable scope—not only a competent educational administrator but also a person fully qualified in the medical profession.

Recruitment of a health director with these dual qualifications is not easy. This stems from the fact that the average earning power of competent physicians is greater than that of competent school administrators. Fortunately, there are physicians who are as wholeheartedly dedicated to education as to medicine. But the supply is short and bidding is high, a fact confirmed by surveys which show physician-health directors generally in the higher echelons on administrative salary schedules.

In San Diego the Director of Health Education is placed on the administrative salary schedule in close relationship

to the assistant superintendents and to directors who are responsible for administrative leadership in other areas of similar scope and importance, for example, the Director of Guidance.

For those systems maintaining clinical services, a similar problem will exist in providing the necessary staff of doctors and dentists. Probably the most satisfactory answer here is not to attempt to employ doctors or dentists for full-time clinical service; the cost of providing compensation equivalent to the general earning power of such professionals would be too great.

This problem has been resolved satisfactorily in San Diego by staffing the clinics with young doctors and dentists, competent but not yet established in private practice, on a half-time basis. A young man facing the financial burden of setting up an office without an established practice finds a definite advantage in the guaranteed earning of half-time employment, which still allows an opportunity for gradual building of a practice. Fairly rapid turnover of personnel is inherent in this system, but it does provide competent personnel for clinical services.

The selection and assignment of the larger corps of health specialists—the nurses, technicians, and special teachers—must be done according to prescribed, consistent procedures that bear a realistic relationship to personnel policies governing all other professionally trained staff members. This is important in order to maintain a necessary high level of morale, since health workers are professional. In California, all health workers are required to hold the Health and Development credential, which is specific to health education in the same manner that other credentials are specific to prescribed subject areas or grade levels.

Successful practice in San Diego has been to place nurses and other health specialists—audiologists, audiometrists, dental hygienists, and social hygiene counselors—on the teachers' salary schedule in accordance with training and experience. They are eligible for the same tenure and retirement benefits that apply to teachers.

A survey conducted within the last year by the San Diego City Schools Research Department revealed that general practice among larger school systems is to place nurses and other health specialists on the teachers' salary schedule. A few systems place these employees on a civil service schedule, but they are in the minority.

Assignment and Supervision of Nurses. It is accepted that the lighter the teacher's classroom load, the more effective can be the teaching. The same is true of nurses; the degree of effectiveness of both the instructional and services aspects of the health program will depend upon the ratio of nurses to pupils. The administrator's problem is to arrive at a nurse-pupil ratio which will allow for efficient health services within defensible budget expenditures.

Experience over a period of time would seem to indicate that a reasonably workable and effective ratio would allow for one nurse to each 1000 or 1200 pupils. As practiced in San Diego, this ratio tends to provide one nurse (on a split-time schedule) for every two average-sized elementary schools, with the larger elementary schools (of approximately 1000 enrollment) and all secondary schools each having a full-time nurse.

Admittedly, this assignment schedule has placed a disproportionate load on nurses in the larger secondary schools. This year, clerical assistance has been assigned to the health offices in the larger

secondary schools to allow the nurses opportunity to give increased attention to direct health services.

With one exception, no special problems appear to be inherent in the supervision of health workers. The exception concerns the school nurse, whose unique assignment subjects her to direct supervision from two sources—the health director and the school principal.

The nurse must look to the health di-

rector for specialized and technical direction, but as an assigned staff member in the school she must be subject to the principal's authority and final responsibility for control of the program in the school. Here the general administrator's expert skill will be needed to set up the conditions under which a delicate balance of authority will be maintained to the end that health instruction and services will be of the highest order.



REVIEWS

Society and Education, by Robert I. Havighurst and Bernice L. Neugarten. Boston, Allyn and Bacon, Inc., 1957. xv + 465 pp. \$5.75.

Education and the Social Order, edited by Blaine E. Mercer and Edwin R. Carr. New York, Rinehart and Company, Inc., 1957. xv + 585 pp. \$6.00.

Thirty years ago educational sociology was one of the most promising of the new disciplines in the field of teacher education.

Answers to a questionnaire sent to 505 institutions in 1926 revealed that 38 per cent offered such courses and 15 per cent required them of students majoring in education.¹ Three years later another observer stated that educational sociology was "about to get the center of the stage" among the recent additions to teacher-education curricula, and he wondered whether this success was to be of an ephemeral or a lasting nature.²

Such doubts were well founded: during the depression years a reaction set in. Enrollment and even offerings in educational sociology declined. In 1947 a survey of 239 institutions showed that only 28 per cent included courses in educational sociology in their teacher-education programs and only 6 per cent required it.³ Many educators be-

gan to stress a knowledge of psychology as the most important attribute of the school-teacher. During the period 1940-1955, few significant textbooks in educational sociology were published, while volumes on educational psychology literally poured from the presses. Despite John Dewey's insistence that we must study the child *in his society*, a considerable number of authors concentrated upon the former component to the neglect of the latter.

It well may be that it is the current interest in *social* psychology, engendered during the recent war and promoted by many scholars of great ability and prestige, that has turned attention once more to the sociological aspects of education. The past two years have not only witnessed a distinct revival of interest in these aspects, but have also produced several good textbooks designed for college courses in educational sociology. The two volumes analyzed in this review are certainly among the best recently issued. Different though they are in approach, structure, and content, both should greatly enhance the new evaluation of the subject and perhaps lead to a new interpretation.

The text by Havighurst and Neugarten stems from the Committee on Human Development at the University of Chicago, of which both authors are members. Naturally it reflects some of the experience of that Committee, which was established for the purpose of bringing the approaches and techniques of several disciplines—particularly sociology, social anthropology, and psychology—to the study of human development. The authors acknowledge their debt to educational psychology by stating in the preface that they have based the organizational structure of their book on typi-

¹ Harvey Lee, *The Status of Educational Sociology in Normal Schools, Teachers College, Colleges, and Universities* (New York, New York University Book Store), 1928.

² Richard Aspinwall, "Some Reflections Upon the Field of Educational Sociology," *The Journal of Educational Sociology*, Vol. 3, No. 3, November 1929, pp. 186-88.

³ George Squires Herrington, "The Status of Educational Sociology Today," *The Journal of Educational Sociology*, Vol. 21, No. 3, November 1947, pp. 129-39.

cal texts in this field, and also by declaring that "the society . . . and the child growing up in the society constitute the reference points for our examination of the educational system." Part One of the volume is devoted to social structure, social mobility, and the child's socialization process (76 pages); Part Two focuses upon the child's social environment (119 pages); Part Three analyzes the school in relation to various aspects of society (170 pages); and Part Four considers the teacher—his social origins, his social and classroom roles, and his status in the society at present (89 pages). Each of the nineteen chapters offers several exercises (most of them very well formulated) and suggestions for further reading (many of them much too brief). The bibliography is impressive, especially when it is realized that each of its 250 items has been used at least once as a direct reference from material in the text. An excellent index concludes the volume.

The approach of Mercer and Carr (both professors at the University of Colorado) is vastly different, although their stated aims are much the same as those of their colleagues at Chicago. This book is a compilation of articles and excerpts from about sixty authors on two main themes: the reciprocal relations of culture, society and education; and the role of the school in American society. Introducing each of the eleven sub-themes is a brief statement by the editors, who also supply a definition of their "sociological approach to the study of education" in the opening chapter and a concluding essay which points out several practical applications of the theories expounded in the book.

One noticeable feature of this volume is the recency of the articles included. Only two selections antedate World War I: Charles Horton Cooley's cogent remarks on primary groups, and Max Weber's brilliant exposition of the characteristics of bureaucracy. (Both are undoubtedly worth reprinting for today's audience, but one might wish that the latter theme had also been served by the inclusion of an even earlier author:

John Taylor and his remarkably prescient views on "the aristocracy of paper and patronage."⁴) Three other selections, including one from John Dewey, date from the period 1926-1937. For the rest, twenty-five were written in the 1940's, and thirty-eight in the 1950's. Thus, more than half of the material reflects current views on current problems—a rarity in textbooks in any field.

It is obvious that such preoccupation with recent writings might also have serious disadvantages owing to lack of perspective, the possibly ephemeral nature of the problems, or the disregard of valuable historical writings whose contribution may still be valuable. The editors have certainly endeavored to avoid the first pitfall by offering several viewpoints on each of the sub-themes, usually from authors of well-known perspicacity and seasoned knowledge. As to the second danger, who could claim that such problems as class stratification, ethnic variations, moral and spiritual values, and the role of the schools in promoting democracy are likely to disappear in the near future? Only the third possibility is worthy of further consideration in relation to this volume, and even here it should be recognized that all editors must make choices. Professors Mercer and Carr have chosen, for the most part, to present contemporary opinions rather than historical commentaries. If we cannot have both in one volume, we can at least be thankful that the current contributions are so wisely selected and so competently organized.

Although no direct comparison of the two texts is required in a review of this nature, the mention of a few points of contrast might be of service to instructors searching for a new text in the field of educational sociology. First of all, a book by two authors generally has better unity and tighter structure than one by more than sixty, no matter how competent the editing. The generality applies in some degree to this case. On the

⁴ John Taylor, *An Inquiry Into the Principles and Policy of the Government of the United States* (Fredericksburg, Va., Green and Cady, 1814).

other hand, it is impossible for two persons, no matter how able, to provide the tremendous range of opinion offered in a large compilation. Since both books are concerned with much the same sub-themes and topics, the differences in content are due largely to the anthropological approach of Mercer and Carr (especially in their Chapter II) and the psychological approach of Havighurst and Neugarten (see their Chapters V and VII). Both include sections on The Teacher, but only the former offers selections on moral and spiritual values and only the latter emphasizes education for international understanding. Havighurst and Neugarten provide thirty-six major statistical tables and several more of an incidental nature; Mercer and Carr offer only a few. In summary, perhaps it would be fair to say that Havighurst and Neugarten have given us a solid, practical, informative, and easily understood textbook, while Mercer and Carr have compiled a remarkably fine collection of theoretical material which cannot fail to be of great value to the more advanced student of education.

WILLIAM H. E. JOHNSON
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Rhetoric in Greco-Roman Education, by Donald Lemen Clark. New York, Columbia University Press, 1957. xii + 285 pp. \$4.50.

The ancient system of training in rhetoric—using the term rhetoric in its widest and best sense—might be thought by some to have declined along with the study of the classical languages. In reality this is true only in a limited sense. Professor Clark has written this book to make it possible for persons who do not themselves have classical training, but are concerned with modern education to understand what the essential purpose of the rhetorical training was, what its results were, and ways in which the ancient methods, quite independently of the classical languages and making due allowance for changed conditions, are potentially useful to

"all teachers of English composition, creative writing, or the arts of communication in our schools and colleges, devoted as they are to furnishing a general education for a democratic society." (p. vii)

Professor Clark possesses unusual qualifications for this task. He has spent a long and distinguished career as a teacher of English, and is now Professor Emeritus of Rhetoric in Columbia University. He also has a high degree of competence in the classical languages, and many of the translations of the Greek and Latin authors printed in this volume are his own.

The author states at the beginning of his Preface, "... this book is about teaching. It is written primarily for teachers." Professor Clark writes always with an eye to modern problems and requirements, and also with the professional purpose of making available to younger colleagues something of what he himself has learned in the course both of teaching the ancient rhetorical writings to present-day students and of using some of the ancient techniques to teach the arts of communication in modern terms.

In fact the great merit of the book is that it sets out clearly and simply, and in the universal terms of the arts of communication and of persuasion, just what the ancient methods of teaching pleasing and successful speaking and writing were. Professor Clark does this so far as possible in quotations (in translation) from the ancient writers themselves, which he organizes and comments upon on the basis of his own experience, and always with the modern classroom in mind. Rhetoric to the ancients did not mean simply style and correctness (and all too often, over-embellishment, as the author notes); it was a practical tool in an educational system which was itself primarily utilitarian in purpose—utilitarian, that is, in terms of the world of that day. Isocrates (436-338 B.C.), "the earliest and noblest example of the teacher of rhetoric" and the master of Greek style, thought of himself as working for the true advantage of his pupils, and looked upon the discipline of rhetoric as "the training of young people to take their place in a

human society where all transactions are conducted through the medium of language." (p. 58) Professor Clark writes not as an apologist for the classics, but as a teacher and practitioner of a basic educational discipline which is as important now as it was in classical antiquity—or for that matter at any other time. We are shown how the ancient student was made familiar with the accepted standards of good speaking and writing, how the study and imitation of the methods of successful speakers and writers were approached from an entirely practical point of view, and how the student was taught to carry out various types of prearranged exercises, both spoken and written—exercises which had been carefully prepared by skilled teachers to develop certain aspects of the student's abilities. We see the way in which the teacher trained the student to evaluate and criticize his subject and to discover the material pertinent to it, and then how to put it in correct language which was appropriate for presenting the theme or argument, either orally or in writing, to a given audience; and the student was very carefully taught to find out what the audience would be like and how it might best be approached. There was some controversy in antiquity, as the author notes, over some of the technical details of teaching, and the dangers of florid excesses, as well as those of confusing rhetoric and truth were fully recognized. But the system as a whole was never seriously questioned in antiquity, and once established it was never changed, for the results were in the main looked upon as satisfactory, and it is certain that in the world of that day the program did produce able statesmen, scientists, and philosophers.

Professor Clark's chief object is to show the real potentialities of rhetorical training in the larger framework of the liberal arts program. No one would recommend the full-dress revival of the ancient system in the present day, but the author does make it clear—with wisdom, sympathy, and humor—that modern teachers may get some valuable ideas from their ancient colleagues; and

this book may be taken as a readable, sober, and realistic guide.

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Supervisory and Executive Development,
by Norman R. F. Maier, Allen R. Solem, and Ayesha A. Maier. New York, John Wiley & Sons, Inc., 1957. 330 pp. \$6.50.

This book combines the methodology of role playing or sociodrama with that of the case study as an approach to dealing with supervisory and executive problems and responsibilities, in a clear and detailed description of how role playing and case studies may be integrated. An individual may thus learn to act not the role of another, but his own part in varied situations and under many conditions. A wide range of case problems is presented. The health, education, and welfare administrator will discover that he shares many of these problems with the industrial supervisor or executive.

Each problem is accompanied by detailed documentation. The reader's attention is first focused on the central problem to be dealt with in the exercise. This is followed by a careful presentation of steps to be taken in the role playing and analysis procedures, so that appropriate learnings may be made visible. Devices and procedures for observing and evaluating the role behavior and events are also suggested. Finally, the basic concepts implicit in the learnings and activities are identified and discussed, to complete the learning unit. The volume and its methodological proposals should be far more effective in dealing with the needs for behavioral change in supervisors and executives than is the conventional pontification about what the "ideal" supervisor or executive "should" do in an "ideal situation," neither of which ever exists. However, the authors assume that the supervisor or the executive is ready to "step out of

role," his conventional role, experiment with new role behavior, and view his administrative problems as a whole with unusual objectivity and in terms of his own actions. This is neither commonplace nor easy. The stake which many supervisors and executives have in their own way of dealing with operations makes this extremely difficult.

Like other types of learning and problem solving advocated in graduate and professional education, this method can result in not only a lot of words but also a lot of activity on a simulated stage with a hypothetical reality. The "actors," the supervisors or executives, frequently refuse to recognize the reality of the problem or the situation. It is so much easier to deal with the hypothetical "other" than it is to confront the strengths and needs of the real self. Teachers and trainers utilizing this method will also find that it requires diagnostic skill and sensitivity frequently missing from the repertoire of the traditional teacher or trainer who relies so heavily on words and the sensitivity and skill of the impersonal authors of texts or references. The approach or method proposed can therefore be disarming for both the teacher and the student. It will be well not only to "read the directions before using," but also to consider the possible implications.

KENNETH HERROLD
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Improving Reading in the Junior High School, by L. Jane Stewart, Frieda M. Heller, and Elsie J. Alberty. New York, Appleton-Century-Crofts, Inc., 1957. vii + 67 pp. 95 cents.

While not entirely obsolete, the belief is giving way that it is the job of the elementary school to see to it that children learn to read, while that of the junior and senior high school is to use the skills previously mastered to read to learn. All the skills necessary for successful reading of many kinds of content cannot possibly be taught in six years in the early life of the child—

as modern educators, including the writers of this report, so well know. Learning to read and reading to learn go hand in hand; they are complementary rather than serial in good classroom practice, whether one is in first grade or in senior high school.

Yet there are so few reports of actual experiences in teaching reading at the junior-high-school level that this monograph by a core teacher, the school librarian, and the coordinator of research at the Ohio State University School is a welcome addition to professional literature about practical applications in teaching reading. These writers set out to do three things. They explain, concisely, their perceptions of the values and operations of the University School in which their teaching of reading finds its bearings. Next, they describe honestly, unpretentiously, and clearly what they actually did with one eighth-grade core group to stimulate and refine the reading habits and skills of these children. Finally, they discuss the evaluation procedures used to assess progress, and the results obtained from their experimentation. Throughout the monograph one has a sense of being in a classroom, planning with the teacher, choosing activities, and appraising what is being done. These writers know how to communicate with other teachers: how to share know-how; how to suggest procedures; how to encourage others to develop their own practices that are suitable to their situations.

In looking more intimately into the kinds of experiences that these eighth-grade students had in relation to core, one notes that much reading was done in content with which the group was working from a problems approach. Other reading was being done for its own contribution to the individual, with no intent to relate its meaning to on-going studies. These writers suggest that in the junior high school a neat balance needs to be maintained between reading as a means and as an end in and of itself. They further suggest that it is by discerning observation of a child reading that a teacher discovers what skills need reinforcing so that appropriate practice mate-

rials can be provided. They also point up the desirability of appropriate common group reading experiences and of individualized guidance. They believe in the keeping of cumulative reading records, in the use of other media of communication as well as reading. Certainly there is little that is novel and nothing revolutionary in such suggestions. What makes this experimentation unique is that these teachers did something sensible about the reading of junior-high-school students, which every teacher

at this level might well do in his own way, in his own classroom.

This report offers no formula, no panacea, no regulations. Nor is it vacuous or platitudinous. Rather, with effectual simplicity, the writers spell out many suggestions that other teachers might profitably try out. Here is a do-it-yourself book, in essence, but a built-in kit of materials, happily, is not supplied. It is a stimulant, not a tranquilizer.

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TEACHERS COLLEGE RECORD

A Rational Faith in Education*

GEORGE S. COUNTS

PROFESSOR EMERITUS OF EDUCATION, TEACHERS COLLEGE

INTRODUCTORY STATEMENT

THE Brazilian Center of Educational Research of Rio de Janeiro is a Brazilian Government institution set up to coordinate educational research in the country, together with five other Regional Centers, located respectively at Pôrto Alegre, São Paulo, Belo Horizonte, Salvador, and Recife.

Within its program the Center has organized a series of lectures, under the title "Education and Society," to be given every year by a national or foreign educator of outstanding eminence, and involving great contemporary problems related to education.

For the first year of this series of lectures, the Center was proud of being able to bring to Brazil one of the foremost social thinkers of our times, Professor George S. Counts, from Teachers College, Columbia University.

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* Dr. Counts is lecturing in many colleges and universities and before professional and civic groups. He is a member of the P.E.N. Club and State Chairman of the Liberal Party of New York. His most recent publication is *The Challenge of Soviet Education*.

of TEACHERS COLLEGE RECORD, will also very soon be published in Portuguese, in order to extend, in the form of a book, the profound impression they made on those who had the privilege of attending them personally.

Professor Counts was able to transmit a message of hope and greatness, encouraging us to rise to the challenge brought about by our disturbed and dynamic times.

Short though intense, the sojourn of Professor Counts in Brazil left among Brazilian educators many friends who like to call him "our teacher." No one else could initiate our "Education and Society Lectures" and give to them, at the beginning, the range and the tone we desire for such lectures.

ANÍSIO TEIXEIRA, *Director
of the Brazilian Center
of Educational Research*

WE IN the United States have a long record of faith in both the power and beneficence of education. And we have commonly identified education with the work of the school. From early times we have associated education with the advance of civilization and the cause

of human freedom. During colonial days, even as we struggled to survive in a strange land, we nurtured this faith. The founders of the Republic, under the influence of the revolutionary thought of the age in both Europe and America, believed that the strength of the new nation would depend on the spread of learning and enlightenment. "If the condition of man is to be progressively ameliorated, as we fondly hope and believe," wrote Thomas Jefferson, father of our democracy, "education is to be the chief instrument in effecting it." The great champions of popular liberty throughout our national history have generally insisted that the survival of free institutions requires an educated people. Horace Mann, father of the common school, a school open to all children regardless of class, religion, or family circumstance, expressed the sentiments of succeeding generations when he said: "The Common School is the greatest discovery ever made by man." And the National Education Association has chosen as the slogan for its one-hundredth anniversary in 1957: "An educated people moves freedom forward." So, when confronted with difficult personal or social problems in the present critical epoch, we are inclined to turn to education as an unfailing solution.

Our historic faith has been translated into vigorous and sustained action. In 1837 Francis J. Grund, a Bohemian-born and Austrian-educated American writer, observed that "with the exception of Protestant Germany, there is no country in which so much has been done for the education of children, as in the United States of America." During the next century we developed a comprehensive system of public schools which has challenged and influenced the educational thought and practice of the Old World.

In our justly celebrated "educational ladder" we repudiated the European aristocratic idea of separate schools for the "classes" and the "masses" and established the *principle* of a single educational system for all the people. Reaching from the kindergarten to the graduate and professional faculties of the university and designed to shatter the time-honored social barriers to advanced training, it is one of the finest and most distinctive expressions of our democracy. Although the measures adopted have by no means overcome differences in family income and cultural heritage or fully equalized educational opportunities at the higher levels, our secondary schools and colleges probably enroll as many young people from fourteen to twenty-two years of age as the corresponding institutions of all the rest of the world. Moreover, wherever the system of rigid social classes is rejected the "educational ladder" is welcomed.

The contribution to our democracy of this vast network of schools can scarcely be overemphasized. If they were to be closed for a generation, our entire economic and political fabric would disintegrate and we would be forced back to some relatively primitive and simple mode of life. That there are grave defects and shortcomings in both the conception and the administration of our schools must be granted. Yet with all their deficiencies they constitute one of the glories of our Republic.

II

Our faith in the beneficence of schools, however, has oftentimes been uncritical and superficial. As a people we have rarely, if ever, inquired deeply into the social, moral, and cultural foundations of education. We have failed to give sufficient thought to the diversity of educa-

tional conceptions and programs in history and in the contemporary world. We have equated education with enlightenment and enlightenment with education. We have assumed it to be a process that goes on more or less naturally and inevitably in the school and is good in any quantity for the ills besetting mankind and for the advancement of popular rule. We have assumed further that in essence it is a single thing, everywhere the same, governed by its own laws, feared by despotisms, and cherished by free peoples. We have tended to identify it with democracy and human progress, not sensing clearly and positively that there is an appropriate education for every society or civilization and that a form which is suited to one may destroy another. Long ago we could have read and pondered with profit the sage observation of Montesquieu that "the laws of education ought to be in relation to the principles of government." If we had, the National Education Association would not be proclaiming without qualification today that "an educated people moves freedom forward."

Our uncritical attitude may have had a certain justification in the nineteenth century when, with a single exception, autocratic states opposed the founding of schools in order, as we used to say, "to keep their people in ignorance." The case of Prussia, which led the world in the development of an efficient system of elementary education for the masses, was conveniently disposed of as "the exception that proves the rule." We did not realize that the word "proves" in this old English adage actually meant "tests" and consequently implied that if the rule could not embrace the exception the rule itself would have to be abandoned. Certainly the renowned *Volks-*

schule strengthened rather than weakened the Hohenzollern dynasty. This was demonstrated in the Seven Weeks' War between Prussia and Austria in 1866. "The victory of the Prussians over the Austrians," wrote the German historian Oskar Peschel, "was a victory of the Prussian over the Austrian schoolmaster."

The rise of the contemporary totalitarian states, of the so-called "popular despotisms" of the twentieth century, has made imperative a critical re-examination of our historical conceptions. These states have equalled or surpassed the democracies in their devotion to and support of schools and other forms of organized education, most strikingly perhaps in the case of the Soviet Union. We should know now that literacy, earlier regarded as a reliable index of popular enlightenment, may be an instrument through which a controlled press may enslave a whole people. We should know also that the level of human culture cannot be measured by the number of schools and other agencies maintained by a society for the instruction of the young. Germany under the Nazis and Japan under the military caste were among the most literate and well-schooled lands on the face of the earth. Our traditional faith in education as a liberator of mankind is justified only if education is carefully and effectively directed toward such a purpose.

III

An unvarnished account of the role of organized education in history from the age of pre-literate man to the middle of the twentieth century fails utterly to support the traditional faith in the beneficence of schools and other agencies for the rearing of the young. The period between the great wars, as we have suggested, is particularly illuminating in this

respect. The record should teach us that only an education designed to serve beneficent ends can ever be beneficent in any human conception of the term.

In *The Outline of History*, published in 1920, H. G. Wells, one of the prophets of our time, declared that "human history becomes more and more a race between education and catastrophe." During the 1920's this statement was probably quoted more widely and favorably than any other by educators in the United States. It was clearly in accord with our traditional faith. Early in 1939, in *The Fate of Man*, Wells observed that catastrophe "was well on its way," that education seemed "unable to get started," that indeed it had not even "readjusted itself to start." He concluded with the melancholy thought that "the race may, after all, prove a walk-over for disaster."

We know today that catastrophe triumphed and with terrifying swiftness. What went wrong? Did the nations of the world fail to build enough schools or train enough teachers? Or did education prove to be a feeble force in society? Actually the race was not between education in general and catastrophe, as Wells himself would have been the first to admit. The years between the wars witnessed an unprecedented expansion of organized education, of schools and colleges and other agencies for informing and molding the mind. In fact, never before had the problem of rearing the young and instructing the old received so much attention from the heads of government and the leaders of society. In the United States the number of students attending secondary schools increased from 2,500,000 in 1920 to 6,925,000 in 1940, while the enrollment in higher schools advanced from 750,000 to 1,800,000. During the same period Soviet Russia probably directed a larger *pro-*

portion of the total national income to the support of education than any other country in history. The number of young and old attending schools and classes of all grades and types advanced from eight or nine millions to probably thirty-five millions. Following the Revolution and particularly after the launching of the First Five-Year Plan in 1928 the Soviet leaders conducted the most comprehensive campaign ever attempted to wipe out illiteracy. And the entire cultural apparatus, including the press, the radio, the theatre, the cinema, and even the circus, was directed toward the achievement of educational goals established by the Communist dictatorship. The Axis powers—Germany, Italy, and Japan—spent enormous sums on education and gave as close attention to shaping the minds of children and youth as to the reconstruction of the economy and the strengthening of the armed forces. In many other countries it was an era of educational expansion.

Comparatively little of this expansion was designed to prevent catastrophe. Indeed to a very large degree education between the wars was actually the handmaiden or midwife of catastrophe. This was obviously and avowedly true in the case of the totalitarian states. Children were taught in Italy that the time had come to restore the Roman Empire, that "it is better to live a day as a lion than a thousand years as a lamb"; in Germany that the Nordic race is immeasurably superior to all others, that the Third Reich is justified in extending its boundaries in all directions, that only in war does man fulfill his highest destiny; in Japan that the Japanese are the chosen people of God, that they should rightly covet the orange groves of California, that death in battle for the glory of the Son of Heaven is the most exalted pur-

pose in life. In the Soviet Union the schools were employed to foster the class struggle, to misrepresent the social institutions of "capitalist" nations, and to propagate the doctrine that Russia was the spearhead of a world revolution which in time would spread to all countries and overthrow the existing order everywhere. And the schools in all of these totalitarian states sought to inculcate in the minds of the young blind and fanatical loyalty to the dictatorship. At the same time, no free society anywhere confronted the problem of education boldly and imaginatively. Throughout the world, education, either deliberately or unwittingly, helped to bring upon mankind the disasters that came close to destroying the best in our civilization. At the very least, it was not designed, either in conception or in practice, to oppose the swift advance of catastrophe.

We know today, if we have learned the lesson of the immediate past, that organized education may or may not serve the cause of peace, liberty, and justice on the earth. In fact, we know that it may serve any cause—tyranny as well as freedom, ignorance as well as enlightenment, falsehood as well as truth, war as well as peace, death as well as life. It may even lead men and women to think they are free even as it rivets upon them the chains of bondage. Education is indeed a force of great power, but whether it is good or bad depends, not on the laws of learning, but on the conception of life or civilization which it expresses.

IV

The need today in every free society on the planet is for a great education—great in its conception and great in its operation. It is in such terms that the race, as Wells saw it more than a generation ago, is still on. We live today, to

employ Arnold H. Toynbee's phrase, in a "time of troubles," perhaps the most fateful in the whole history of mankind. Since the early years of this century we have been living in a world increasingly strange and even terrifying. We have known an endless succession of crises at home and abroad. We have watched tragedy compounding tragedy in ever-mounting fury. We have seen our seemingly well-founded hopes ground under the heel of events. The solid verities and certainties of the nineteenth century seem to have vanished. Nothing appears to be secure and enduring. Social institutions, human relations, value systems, and conceptions of life and destiny are in flux. Thoughtful men and women everywhere are anxious and fearful about the future. After a retreat of centuries, despotism is on the march again.

Less than a generation ago we experienced a great economic disaster. At the very moment when our political and industrial leaders in the United States were confidently predicting an enduring and rising prosperity for an unlimited future under an economic system founded on the laws of nature, we were struck by an economic depression which rocked the foundations of the Republic and imperilled the entire free world. The marketing structure collapsed, banks, shops and factories closed, farms turned backward to self-sufficiency, wheels of transport stopped turning, lifetime savings were wiped out, twelve to fifteen million workers lost their jobs, the total income was reduced by half, and rich and poor alike were gripped by fear. In response to the general distress revolutionary doctrines spread through the land and embryonic dictators on European models appeared in the United States. This traumatic experience tempered somewhat the traditional optimism of our

people. Another disaster of such magnitude might bring additional victories to Communist totalitarianism.

Out of the dislocation of institutions, the conflict of classes, rivalries of the past, and the changing power structure of the world have come the great wars, revolutions, and counterrevolutions of our time. On this theme we need not dwell except to observe that a third world war waged with the new and ever more powerful engines of destruction might destroy advanced civilization everywhere and push mankind as a whole back toward barbarism, if it did not destroy the human race. And the epoch of revolution and counterrevolutions probably still has its course to run. It is assumed here that organized education must be conceived in the light of these troubled times and with a faith that it might illuminate the dark road which lies ahead for all mankind.

V

The twentieth century, as we have noted, has witnessed the growth of organized education and interest in organized education throughout the world. In the United States, as elsewhere, numerous teachers colleges and departments of education in our universities have been established and an enormous amount of energy has been devoted to the improvement of education. Our literature, both lay and professional, is full of discussions of what is wrong with the school and of proposals to correct its weaknesses. The shelves of our libraries are laden with educational reports, surveys, and studies, including countless doctoral dissertations. New theories and experiments follow one another in an endless stream. This activity is by no means all lost motion; it has undoubtedly resulted in considerable improvement in the conduct of the

school. Yet most of it deals with either the surface or the mechanics of the problem. Indeed, some of the most widely and hotly disputed proposals for reform during our generation are little more than nostrums which largely ignore the basic problem of all educational thought—the problem of the relation of education to the nature and fortunes of our civilization in its historical and world setting. Three such proposals have received much attention during the past fifty years.

The first and most fruitful of these proposals is the development of a science of education. Early in the present century the movement to convert education into a science aroused much enthusiasm and led to the launching of innumerable experimental and statistical studies. The learning process and child growth were subjected to tireless inquiry. Every aspect of the school program was brought under investigation. Vast attention was devoted to the perfection of the machinery of education, to the integration of parts, and to the elimination of friction, to the improvement of buildings and equipment, to the standardization of procedures, to the invention of pedagogical gadgets, to the construction of tests and rating scales for both pupils and teachers, and to the keeping of records of all actions and transactions. For a time philosophy was relegated to an inferior position and the prediction was confidently made in some quarters that all educational problems would be solved by the new science. Unfortunately the traditional program of the school was taken for granted and the emphasis laid on increased efficiency in the operation of that program. Education was regarded as an autonomous process which might be studied in isolation from society and civilization and perfected according to its own laws.

That this movement has contributed much of value to the advance of education cannot be disputed. The need today is for a more generous conception of a science of education—a science that is closely integrated with all the other sciences of society and human culture. We must realize that the answers to the most profound questions regarding the conduct of education, questions involving values and purposes, will have to be found outside the school and beyond the imperatives of scientific knowledge. A science can tell us how to produce a warrior or a pacifist, a slave or a free man, but it cannot tell us that we *should do* any one of these things. Science can penetrate the secrets of the atom, but it cannot tell us whether we should make atomic bombs or convert atomic energy to peaceful purposes. Such questions lie in the realms of ethics and politics.

A second proposal seeks guidance in the interests and problems of children. The presumption here seems to be that the child achieves maturity through a process of spontaneous generation or inner unfoldment which the adult world through its educational agencies should merely guard and nourish. According to this view, the child, and not the teacher or the school, should play the decisive role in shaping both the processes and the ends of education. The interests and problems of boys and girls are assumed to constitute a more trustworthy guide than the experience and wisdom of their elders. It is argued, moreover, that any positive interference by members of the older generation is a form of imposition or indoctrination and is certain to lead to frustration and regimentation of the mind. Here, undoubtedly, is the most romantic interpretation of human nature since Rousseau.

In the proposal, however, there is an

important insight. It recognizes the psychological truth that interest is a condition of effective and economical learning. The immediate concerns of the young, therefore, should always play a large role in education. Like the learning process and the "laws of the organism" generally, they provide the limits within which the teachers must operate. But those limits are known to be extremely wide and capricious. We must assume that children in their biological inheritance are essentially alike in all times and places, among all races and peoples, among all groups and classes. Yet their interests vary greatly from epoch to epoch and from society to society. Also they are extraordinarily fluid and subject to change. The interest that a child brings to school in the morning may be the result of the casual conversation of his parents at home, of a radio program devised to sell a hair tonic, of a moving picture produced with an eye on the box office, or of some incident observed in the street or on the highway. The responsibility of the school is not to follow the interests of the young, but rather to assist in arousing and building worthy, fruitful, and abiding interests.

It should be recognized also that this proposal contains a great moral affirmation. In conformity with the democratic ethic, it affirms that the child is a person and that his personality should always be treated with respect and regarded as precious. The historical record of the treatment of the young by their elders, including their teachers, is full of horrors. The liberation of boys and girls from the reign of adult tyranny and ignorance is one of the marks of a humane civilization. Yet respect for the personality of the child is expressed most fully in an educational program dedicated to the development of a mature personal-

ity deserving respect. "We see quite clearly," writes the great Polish anthropologist, Bronislaw Malinowski, "why the freedom of the child, in the sense of letting him do what he wishes and as he likes is unreal. In the interest of his own organism he has constantly to be trammelled in education from acts which are biologically dangerous, or which are culturally useless. His whims, his fits of idleness or disobedience must be gradually curtailed, formed and translated into culturally relevant choices. There is also no freedom in action except within the context of organized human groups."¹ We should never forget that societies rightly establish schools so that the child may become something which otherwise he would not become.

A third proposal which has been before us for about a quarter of a century finds the solution of the educational problem in the study of the so-called "one hundred great books" at the college level and preparation for their study in the lower schools. It must be admitted at once that from the standpoint of the teacher this is the most attractive proposal now current. It is the ideal answer of the pedagogue to the truly perplexing problems confronting education. In the first place, it would give him a virtual monopoly over a special body of knowledge, with no competitors. If he could only convince the other members of society of the worth of this esoteric knowledge, he would be in the enviable position of a long line of ancestors reaching back to the shaman and the medicine man of primitive society. In the second place, once having mastered the "great books" he could pursue his calling for the rest of his life without being disturbed by

the issues of depression and prosperity, of war and peace, of tyranny and freedom, of the future of his country and mankind. He could withdraw from the world and dwell all his years in a scholastic paradise. He could be fairly sure, moreover, that only two or three books at most would be added in his lifetime, that their status would be uncertain for at least a century, and that anyway they could not equal in excellence those written by the "ancients" long ago.

The basic argument of the proposal seems to be that education is essentially a process of mental training, that the great literary classics are the finest product of the human mind, and that therefore they are the best tools for the training of the mind. As a matter of fact, education is far more than mental training: it is first of all a process of inducting the young into the ways, privileges, and responsibilities of a given society. Also, these classics, precious as they are, cannot be said without qualification to be the finest products of the human spirit: they scarcely rank above a great living civilization, a successful system of democratic government, a vast industrial enterprise, a splendid labor union, a famous scientific laboratory, or even a fine human being who possibly never read a single one of them. Likewise, that they are the best tools for the development of the mind is hardly supported either by the history of education or by psychological investigation. Experience suggests rather that this is the surest road that man has yet discovered to formalism, sterility, and stagnation in education. Although the proposal tends to correct the overweening concern of my countrymen for the immediate and the narrowly practical, directs attention to certain sublime achievements of the mind of man, emphasizes the processes of thought and

¹ Bronislaw Malinowski, *Freedom and Civilization* (New York, Roy Publishers, 1944), p. 145.

reflection, and stresses universal and enduring elements in the human heritage, it is fundamentally a manifestation of academic nostalgia. It constitutes an attempt to retire, without sacrifice of glory, from the present troubled age.

VI

From some things I have said in this address my audience might infer that I have little faith in the beneficence of education. Such an inference would be a mistake. I share in large measure the historic faith of my people. The education of the younger generation is a sublime trust. With appropriate qualifications, I find myself in accord with the views expressed by the greatest Russian educator of the nineteenth century, K. D. Ushinsky. Even though working in an "impoverished and unpretentious school," he said, the teacher is a "living member of a great organism which is toiling for the perfection of mankind, which is striving for truth and justice." Even though his cause is modest at first sight, it is "one of the greatest causes of history—a cause on which kingdoms and generations rest." Such is the ideal to which we must all subscribe.

Education, however, as we have emphasized, can never be a purely autonomous process, independent of time and place, conducted according to its own laws. There have been as many educations in history as there have been human societies. It is as much an integral part of a culture or civilization as an eco-

nomic or political system. The very way in which education is conceived, whether its purpose is to enslave or free the mind, is an expression of the society which it serves. Although all educational programs in the world today should embrace the conception of a common humanity, no such program as a whole should be regarded as an article of export either with or without the support of dollars or machine guns. Of necessity an education is a most intimate expression of a particular civilization.

We must seek the broad outlines of a great education therefore, not in the nature of the child, nor in the traditional practices of the school, nor yet in any single segment of our civilization. Such an education must embrace four great tasks in a free society. First of all, it must assure mastery on the part of the younger generation of the essential practical skills and knowledges of the social heritage. Second, it must promote with unflagging zeal an understanding of the world as it is and as it is becoming. Third, it must strive without apology to inculcate in the young loyalty to the great values of a society of free men. Fourth, it must stress the universal in the total human heritage, stimulate the creative faculties of man, and contribute to the advancement of all the humane arts and sciences. Such an education might serve to prevent catastrophe and facilitate the birth of an age of abundance, freedom, justice, beauty, and peace for all mankind.

The Mathematics Curriculum for the High School of the Future*

HOWARD F. FEHR†

PROFESSOR OF MATHEMATICS, TEACHERS COLLEGE

THE present high school curriculum in mathematics is a traditional one. It is outmoded, oriented to nineteenth century mathematics and physics, and no longer provides for present or anticipated needs of high school students. The mathematics curriculum of the future must meet the needs of mathematics, physical sciences, social sciences, engineering, technology, industrial management, and other areas of human endeavor as they are carried on in the second half of the twentieth century. If we are to proceed wisely in constructing a curriculum for the future we must examine first some defects of the present curriculum, second, the present mathematical needs of our society, and third the changing concepts and new developments in mathematics. Then we must temper this mathematical knowledge with our knowledge of the maturity and learning ability of the high school population.

* This article is based on a talk given at the Conference on the American High School, held at the University of Chicago.

† Dr. Fehr is president of the National Council of Teachers of Mathematics and a member of the Mathematical Association of America and the American Mathematical Society. He is the author of *Secondary Mathematics* and co-author (with Veryl Schult) of *Arithmetic at Work* and *Arithmetic in Life*, all published by D. C. Heath.

THE TRADITIONAL PROGRAM

Today the ninth-year mathematics program is commonly given to a study of elementary algebra. What is this study? The manipulation of symbols according to rules in a structureless system.

There are no proofs, there is no system of axioms, there are no undefined terms; the instruction is mostly "how to do." Such terms as literal numbers, general number, unknown, and algebraic numbers are for the most part meaningless, or even confusing. A student learns how to solve equations, but not what an equation is, or what operations are allowable and why, or what the solution indicates. If he is asked to apply his knowledge of solution of equations to problems, the latter must be explained in great detail. That a student learned a set of operations, mostly meaningless to him, and that he can do little with them in any original setting has been shown again and again.

In the tenth or eleventh year the study of this algebra is continued as intermediate algebra. How? By first reviewing the skill algebra of the ninth year in exactly the same way with more complex situations. Then the student learns "how" to handle exponents, logarithms, systems of

equations, progressions, and the binomial expansion without any hint that proof in an axiomatic system is as essential in algebra as it is in dealing with geometric elements. If he is introduced to any other topic it is usually permutations, combinations, and probability. But these are taught in an antiquated manner, ill-adapted for application to modern problems in statistical processes. The function concept present in most texts is no longer generally accepted by mathematicians, and even when presented it contributes little to understanding this important aspect of mathematics.

In either the tenth or the eleventh year the student also studies plane geometry, more correctly termed Euclidean synthetic plane geometry. What does he learn here? He gets an introduction into the physics of a plane through the use of definitions, undefined terms, and a set of assumptions. A year-long chain of theorems follows that in most cases results in large quantities of mere memorization. At the end of the year the student may be a bit more clever at discovering deductions of "so-called" originals, but is he really a better mathematician with a real understanding of the axiomatic structure of mathematics? The answer must be NO!

Twelfth-grade mathematics in the American high school is the grandest fiasco of all mathematical programs. A half year of solid geometry contributes nothing new to an understanding of mathematical structure. The geometry of the sphere, which could become a fine self-contained unit of study, is buried under a heap of useless applications.

To cap the climax we have a semester of trigonometry, which is usually concluded with two months of solution of oblique triangles by the use of logarithms. General angle, reduction formulas, iden-

ties, and equations as taught contribute little to an understanding of trigonometry that is of value for further work in mathematics.

SOCIETY'S NEED FOR MATHEMATICS

Now let us look at the role that mathematics is coming to play in our culture. I shall omit all reference to general education and the mathematical needs of all citizens as a part of their general education. It suffices to say that all citizens need a working knowledge of arithmetic, elementary algebra, and geometric relations and measures. All secondary school students should study mathematics until they have mastered these necessary facts, concepts, and skills. Here I would speak of the newer and more advanced mathematical needs of society.

The degree to which mathematics is applied to the other sciences and to so-called non-scientific social activities has increased tremendously during the last few decades and is increasing continually. Mathematics has always contributed to the fields of physics, engineering, and technology. More recently mathematical methods have been applied to industrial planning, medicine, biochemistry, biophysics, and sociology. Even problems in philosophy and linguistics are being attacked through the use of mathematical logic.

In all of this increased activity it is a curious fact that, although the first investigations were begun by mathematicians, on the whole it is not mathematical propaganda or advertising that has made the situation what it is. It resulted from a genuine demand on the part of workers in these fields who came to feel more and more helpless when they could not handle mathematical methods.

The number and variety of mathemati-

cal disciplines have greatly increased in the last sixty years. New branches of knowledge based on mathematical methods have been created. Among these can be mentioned: Design of Experiments, Mathematical Population Theory, Theory of Risks, Symbolic Logic, Biomathematics, Factor Analysis, Quality Control, Mathematical Theory of Communication, Information Theory, Theory of Strategy and Games, Linear Programming, Periodogramanalysis and Time Series, and Statistical Decision Theory. While not all of these new theories have produced practical results commensurate with their mathematical structure, the judgment of workers in the field is that the mathematical approach has been on the whole beneficial to their particular domains.

Mathematicians themselves are creating new branches of pure mathematics, much of it knowledge that did not exist sixty years ago. We may mention axiomatics, abstract algebra including the theory of groups, rings, fields, and vector spaces; combinatorial topology and algebraic topology; lattice theories; general theory of sets; theory of linear spaces; tensor calculus; and even metamathematics—a study about, not of, mathematics.

I hasten to add that I know little of these fields of applied and pure mathematics except that they exist; that they have burst the existing compartments that house arithmetic, algebra, and geometry; and that in their very nature they make much of the classical treatment of high school mathematics obsolete. (Note that I said *the treatment*, and not the mathematics itself, becomes obsolete.)

NEW POINTS OF VIEW

In the past one hundred years the nature of mathematics as a subject has been

substantially altered by the results of mathematical research and by its applications. Some of this research can have significant impact on the high school program. We can mention only a few of these newer areas of mathematical thought, however, without developing their content.

In the field of algebra we mention first the concepts of group, ring, and field—all dealing with *structural* rather than manipulative aspects of algebra. None of these concepts is difficult to grasp. The concept of field enables us to study the structure of algebra rather than to merely manipulate algebraic expressions. This concept has given rise to studies of different algebras: linear associative, vector, multilinear, and so on. This aspect of algebra has reshaped the thinking and the type of research that are now being done at the frontiers of mathematical knowledge.

An advanced treatise in mathematical analysis of the 1920's-30's, always had a first chapter that contained a treatment of the real number system upon which, of course, the rest of the development rested. If you pick up treatises today, either in advanced algebra, analysis, or geometry, the first chapter is always a treatment of the theory of sets upon which the rest of the development rests. Set theory is the newest unifying concept to enter the field of mathematics. The ideas of sets in modified form can be applied to every portion of the present high school program.

In the field of geometry, new points of view are emerging also. A hundred years ago non-Euclidean geometries became firmly established as worthy structures of mathematical study, thus freeing the subject from the absolute authority of Euclid. With the advent of these new

geometries there arose a critical examination of the axiomatic foundations of Euclidean geometry. This study revealed subtle ideas in the subject that proved it to be too difficult a field for rigorous treatment at the high school level of study. The researchers also established other geometries called projective, affine, elliptic, and hyperbolic, and shattered forever the idea that there is only one kind of geometry. Finally, a new approach to the study of space, called Topology, has opened fields of investigation in which the very first findings are of importance to the present high school geometry program.

THE CURRICULUM OF THE FUTURE

Considering society's demands for mathematics and the modern developments in mathematics mentioned above, we can draw some inferences concerning the curriculum of high school mathematics of the future. We consider here both the junior and the senior high school.

Seventh and Eighth Grades. The first two years of the junior high school will offer an intuitive and informal study of arithmetic, geometry, and some elements of algebra. More precisely, at the end of this informal study, a student should have a mastery of the four fundamental operations with whole numbers, common fractions, and decimal fractions. This includes skill in the operations at adult level (that is, adequate for ordinary life situations) and an understanding of the rationale of the computational processes. A place-value system of numeration with special reference to our decimal system should be understood. Systems of numeration with other bases, particularly the binary system should be investigated. Pupils must be able to handle very large

numbers (greater than 1,000,000) and very small numbers (less than one ten-thousandth, 0.0001). In addition, a knowledge of square root and the ability to find approximate values of square roots of whole numbers by the process of division and averaging the divisor and quotient (Newton's method) are recommended.

An understanding of the language of per cent (rate), percentage, and base is essential and in particular, the ability to find any one of these three designated numbers given the other two. The ability to treat with confidence per cents less than 1 and greater than 100 must be acquired. Applications of per cent to business practices, interest, discount, and budgets should be given only moderate treatment.

The study of arithmetic must include the understanding of ratio as used in comparing sizes of quantities of like kind, in proportions, and in making scale drawings; also the ability to operate with and transform the several systems of measure, including the metric system of length, area, volume, and weight. The nature and use of an arithmetic mean are to be stressed. The work should be directed toward an informal study of algebra.

The informal geometry must include the study of length of a line segment, perimeter of a polygon, and circumference of a circle, area of regions enclosed by polygons and circles, area of solids, volumes enclosed by solids, interior of angles (by degrees). In this work, the use of a ruler (both English and metric) and protractor is learned. The pupil should know the difference between the *process* of measuring and the *measure* of an entity and should develop the ability to apply measurement to practical situations. He uses measurement in drawing

to scale and finding length indirectly.

Further concepts of geometry that should be developed are those of parallel, perpendicular, intersecting, and oblique lines (in a plane and in space); acute, right, obtuse, complementary, supplementary, and vertical angles; scalene, isosceles, and equilateral triangles; right triangles and the Pythagorean relation; sum of the interior angles of a triangle; sides and interior angles of a regular polygon with six or fewer sides. The pupil develops skill in the use of instruments in constructing figures; he learns ideas of symmetry about a point and a line.

Further ideas included in these two years of study are the use of a line segment and area to represent numbers, the reading and construction of bar graphs, line graphs, pictograms, circle graphs, and continuous line graphs, the meaning of scale, formulas for perimeters, areas, volumes and per cents—introduced as these concepts are studied—as mathematical models, the use of symbols in formulas as place holders for numbers arising in measurement, and simple expressions and sentences involving variables.

Algebra. The study of algebra will consist largely of the same subject matter as hitherto. The difference will be in point of view, and this will be concerned principally with concepts, terminology, symbolism, and the introduction of a rather large segment of work on inequalities. The idea of one-dimensional graphs, for example, indicating the set of points for which $x < 3$ will be introduced. There will be a shift of emphasis from stress on mechanical manipulation to understanding of the fundamental ideas and basic laws. The study of the nature of number systems, the variable over the system, and the basic laws for addition

and multiplication, namely the commutative, associative, and distributive laws, are focal points. The application of these laws in various algebraic systems, with emphasis on their generality, the meanings of conditional equations and inequalities, of their solution sets, and of equivalent equations and inequalities will receive as much attention as the mechanics for finding the solution sets.

If this approach to algebra were merely something interesting but useless, something at an abstract level that could be learned by high school students, merely an extension of the algebra of the eighteenth century, or a game for pure mathematicians only, we could ignore it. But it is none of these. It is finding application in all the sciences pure and applied. The ideas are elementary and can give the "meaning" we have been looking for in the teaching of our algebra. It is new. It can be introduced at almost any time in the high school program. It gives to algebra a structural and unifying property. Hence, we cannot afford to ignore this approach as we reconstruct our high school program.

Concepts do not remain static in mathematics. When Leibnitz in 1675 used the word function, he used it as concomitant change. Euler in 1770 said it was the relation between y and x expressed by a freely drawn curve in the plane. Dirichlet said y is called a function of x if y possesses one or more definite values for each of certain values of x in an interval x_0 to x_1 . But today a function is a subset of a Cartesian product in which the first element of an ordered pair occurs only once; that is, a function is a restricted set of ordered pairs of numbers; it is single valued. Added to this changing concept we have the introduction of the new word "relation," which is far more inclusive than function. The nature of a

function—in particular, the linear, quadratic, exponential, and logarithmic functions—will be treated as much as operations with them. Function will be distinct from a relation, and both will be related to sets of ordered pairs of numbers, and a rule or set builder.

The distributive law may be cited as an example of meaningful algebra. This law is the basic idea behind both mental and written arithmetic, the use of parentheses, factoring, multiplication of polynomials, and the manipulations of fractions. If the law is understood, most *special* methods of treating these topics can be eliminated.

Algebra will be further enhanced by introducing deductive reasoning—a procedure that should be taught in all courses of school mathematics and not in geometry courses alone. Thus geometry can be relieved of the burden of total responsibility for deductive methods. For example, students will make certain assumptions and definitions, accept certain undefined terms, and then prove theorems, for example, the square of an odd number is an odd number, and that it is always one more than a multiple of eight. Through such deductive procedures diverse bits of information become related and “hang together,” thereby promoting understanding and assisting the memory. Further, such understanding contributes to the ability to use algebra to solve problems.

Throughout the presentation the concepts and language of set theory will be used. The set concept is elementary and closely related to experience. It permits a variety and richness of problems that call for creative and original thinking, and is one of the great unifying and generalizing concepts of all mathematics. Meaning becomes of utmost importance.

Geometry. The program in geometry will be vastly different from the present program. The usual one and one-half years devoted to plane and solid synthetic geometry will be reduced to considerably less than one year of study. Solid geometry as a half-year course of deductive methods will disappear entirely. Those aspects of solid geometry of importance will be developed along with the corresponding concepts of plane geometry. The treatment of the sphere can be coordinated with the circle: locus will be treated simultaneously in two and three space. The mensuration and construction problems of solid geometry will be developed on an intuitive rather than the present pseudo-deductive basis.

Since deduction is to be stressed throughout the study of mathematics it is not necessary to spend a year on deducing theorems and originals of synthetic geometry. In fact the study of plane synthetic geometry will begin with an informal and intuitive introduction to geometric ideas, followed by a discussion of the nature of deductive reasoning. The formal study will then start with the postulation of the congruence theorems, and proceed as rapidly as possible through a chain of six or eight fundamental theorems to the proof of the Pythagorean theorem. One-third of a year of study is sufficient for this.

With the Pythagorean theorem established, it is possible to proceed to analytic geometry where the fundamental ideas of distance, division of a line segment, slope, equation of a line, and equation of a circle are developed. Thus, a new powerful geometry exists for the student to use. To prove or deduce theorems and originals, both analytic and synthetic methods are now at his disposal.

Trigonometry. Vectors is another

topic of great importance both in physics and in further mathematical study. A unit on vectors, with its assumptions and undefined terms, and the ideas of displacement, multiplication by a scalar, addition, and subtraction will give the student an added tool for proving theorems in geometry and solving problems in forces, acceleration, and rectilinear motion. The study of plane vectors also gives an approach to trigonometry that permits the easy development of periodicity properties of the trigonometric functions.

Today, trigonometry has become an integral part of analysis and has hardly any support as a separate subject, isolated for a half year of study. The trigonometry of real numbers has been developed as a wrapping function of the real axis, and the sine function then repeats its values periodically every 2π , for example, $f(2\pi + x) = f(x)$. Further the sine is an odd function that is $\sin(-x) = -\sin(x)$, while the cosine is an even function that is $\cos(-x) = \cos(x)$. This behavior permits the application of trigonometry to all sorts of periodic phenomena, such as light and sound waves, alternating current, business cycles, heat flow, and harmonic analysis. The concepts of amplitude, period, frequency, and phase, in relation to the sine and cosine as functions of real numbers, have had significant effects in all branches of pure and applied mathematics.

The study of trigonometry will from the very start be related to coordinates, both rectangular and polar. It is to be noted that coordinates are to be continually used throughout the entire study of mathematics in the curriculum of the future. This is a new emphasis. The solution of triangles will play a minor role, the solution of oblique triangles being limited to the use of the law of sines and

the law of cosines, without the use of logarithms. The logarithmic solution of triangles, a speedy method fifty or more years ago, has been outmoded with the advent of electric calculators.

The analytic aspects of trigonometry will be emphasized. In the past, in applications to surveying and navigation, the solution of plane and spherical triangles was the central theme. In the newer uses of trigonometry it is the circular functions of real numbers that occupy the central theme. The study of these functions is greatly facilitated by the concept of a function as a set of ordered pairs of numbers. The usual formulas will be developed with the use of coordinate geometry and in the spirit that trigonometry is a study of periodic functions of real numbers.

Twelfth Year. The elimination of parts of traditional algebra, and much of Euclidean geometry, gives us time to complete the high school program with a study of those topics of advanced algebra that can properly be classified as modern analysis. There will be a study of the elementary functions—polynomial, rational, exponential, logarithmic, and inverse functions. This leads to study of absolute value and limits, followed by a unit on polynomial calculus developed from a meaningful and conceptual viewpoint and not one that is formalistic and mechanical.

I would add one more item of study to the high school curriculum of the future. Just where and how it is to come into the curriculum must be worked out. This is the topic of probability and statistics. Many of the newer applications of mathematics are those underlying chance, that is, probability and statistical inference. These applications involve problems in safety, genetics, longevity,

industrial planning, cost of living, occupational choice, testing, measuring, public opinion poles, theory of games, and so on. Statistical thinking is playing a greater and greater role in the life of educated men and women. An introduction to statistical inference with probabilistic conclusions is as important as the study of deductive systems with universal conclusions.

The two important aspects of statistics are: (1) in a distribution of attributes arising from chance causes there is a coexistence of stability (a central tendency) accompanied by a variation; and (2) by proper sampling techniques based on mathematical probability theory, both the stability and the variation of the entire population can be predicted to a high degree of confidence. The study of the first aspect is accomplished in descriptive statistics, that is the collection, organization, and analysis of numerical data through the use of frequency tables, graphs of distribution, the arithmetic mean, mode, and median, the range, and standard deviation. The second aspect is acquired through the study of combinatorial analysis and partitioning of sets. Both these aspects will be in the mathematics curriculum of the future.

SUMMARY OF THE CURRICULUM

The aim of this entire curriculum is to enable those who are capable and desire to study science, mathematics, technology, or engineering, to enter college prepared to begin a rigorous freshman course in Differential and Integral Calculus. Realizing this aim will be a necessity for the development of our country's scientific progress in the immediate years ahead of us. All highly capable students should pursue this study. For the other college-bound students, the more ad-

vanced part of the proposed curriculum may be delayed and studied as a first-year college program such as that proposed by the College Undergraduate Program Committee of the Mathematical Association of America.

Any seventeenth century mathematician reappearing upon earth today could enter most classrooms in our high schools and, without any preparation, teach the present traditional curriculum, so far is it behind the times. But in order to handle the curriculum proposed here, the seventeenth century mathematician would be at a total loss and have to bring himself up to date with respect to fundamental concepts in every field included in the curriculum—algebra, geometry, trigonometry, calculus, statistics, logic. Most important of all, he would have to catch the spirit of modern mathematics, which began in the twentieth century, a spirit wherein we seek *patterns* of thought, mathematical forms, rather than specific tricks.

It is in this sense that the proposed curriculum is modern and for the future.

Finally, I should like to add only one word concerning those in high school who are not capable or not planning to go to college. Many of the present courses and textbooks for these students are a rehash and stew of everything under the sun. There is no organization, structure, or systematic development of mathematics in many of the books or proposed curricula. It is my hypothesis that the mathematics for these students will and must be the same as the elementary portions of the curriculum I have outlined. The mathematics used in general education in enabling us to understand our universe and solve our daily quantitative problems is the same mathematics that the scientist uses in his research into nature. The difference is one

of complexity and depth. It is merely longer time and more concrete illustrations that are needed for the slow learner, and not a different type of curriculum.

PREPARING TEACHERS FOR THE NEW PROGRAM

Many teachers are convinced that arguments for curricula reform are valid, and that modernization of the curriculum is not only in order but long overdue. These teachers strongly desire to bring their programs and their teaching up to the highest possible standards. At the same time they ask, Who is sufficient to do these things? I shall try to give a brief answer.

Only a very small per cent of the present teachers can possibly have had up-to-date training in subject matter required for the task. Only those who have begun their teaching careers very recently have had an opportunity to take college courses modern in content, and even most of these teachers have had collegiate training of the traditional character. Many teachers are asking, What is contemporary mathematics? Where can we learn it? How can we use it in our classes?

New materials must be made available for classroom teachers, new or greatly revised textbooks must be written, and manuals for teachers must be provided. It is difficult to make changes in educational procedure. It is easy to teach what we were taught in the way we were taught. It is difficult and troublesome to teach something new to which we have heretofore never been exposed. Up to now, mathematicians have gone on their way, creating new concepts and points of view, but not communicating these to the secondary school teacher. Year after year, high school teachers have taught the nineteenth-century program in a satisfactory way, not studying or searching for

newly discovered mathematics. There has thus resulted a huge gap between the frontiers of mathematical knowledge and the high school program. We must now close this gap.

The immediate concern of teachers is the study and acquisition of mathematical knowledge in the following areas.

1. Modern analysis, including the contemporary concepts of variable, function, relation, coordinates and lattices, sentences, and inequalities.
2. Modern algebra, including the basic theory of sets, groups, rings, fields, matrices, linear algebra, and vector space.
3. Modern geometry as a set of transformations, including the basic structure and elements of projective, affine, Euclidean and non-Euclidean geometries, as well as finite systems.
4. Symbolic logic, including the contemporary theory of axiomatics and nature of mathematical proof.
5. Probability, from a set-theoretic approach, including the study of trees, partitioning, combinatorial analysis and continuous, as well as discrete, data.
6. Statistics, both descriptive and inferential, including sampling theory, tests of hypotheses, tests of significance, and design of experiments.

When the teacher has mastered the elements of these areas of contemporary mathematics, then the teaching will of necessity be modern and enthusiastic.

As a fitting close to this discussion, I quote a statement made by a prominent Russian mathematician and educator, B. V. Gnedenko, in 1957.

A teacher who reduces his task to the point that he communicates to the pupil only the sum of knowledge specified in the curriculum and merely teaches the pupil to deal with routine problems, rarely

achieves any success. From the teacher is demanded enthusiasm for his subject and the conviction that his subject is one of the most important affairs of the *nation*. From the teacher is demanded that he implant in the students a love for mathematics and a conviction of the creative powers of his students in mathematics; and that he describe in general outline before their intellectual gaze, the impressive picture of the

uninterrupted development of mathematics, with its close relations to technology, the natural sciences, and all the other manifestations of human activity.¹

Can we require any less of ourselves in the years that lie ahead?

¹ *American Mathematical Monthly*, Vol. 64, No. 6, June-July 1957.

Observations on Desegregation in Baltimore: Three Years Later*

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NEARLY four years have passed since the Supreme Court desegregation decision. Much has been written about the course of events which has brought compliance in the border states and a stalemate or open hostility in the Deep South. Little has been recorded in terms of what happens to children, teachers, and the community after desegregation has been underway for some years.

The early stories of desegregation in Washington, D. C., Baltimore, St. Louis, and Louisville were concerned largely with the factors that created smooth and successful adjustments in the integration processes. These accounts and those that have come from more recently desegregated communities, such as Nashville, all stress the importance of community preparation and support, clear and firm enforcement by local executives and police authorities, unequivocal and strong leadership by school administrators, and

understanding and dedicated action by the teaching staff. We now have reliable data which prove that desegregation has taken place effectively in numerous parts of the country where, but five years ago, "This will not happen in our times, perhaps not for a hundred years," was the oft-quoted belief.

What about the fears of those who felt that it would take a century to ready their communities for desegregation? Have those concerns been borne out? What about the hopes of the nine Supreme Court Judges who felt that desegregation would erase "feelings of inferiority"?

Accounts that deal with the aftermath are just beginning to emerge. The answers, for those who feared and for those who hoped, are not yet fully clear, but evidence is beginning to pile up and give increasing significance to the decision made on May 17, 1954. Recounted below is the story of what has happened in Baltimore during the three years since that decision. Although the writer had the good fortune to observe practices in many schools and to talk to many teachers, principals, pupils, and parents, he takes responsibility for the claims he makes and the issues he presents. He credits his native Maryland soil for the

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inspiration which stimulated the desire to record these happenings.

DESEGREGATION AND JUSTIFIABLE PRIDE

On June 3, but two weeks after the Supreme Court decision, the Baltimore School Board adopted a desegregation policy and on June 10 approved the administrative plan to carry out the policy. The prompt action of the Board was an important factor in the early success of desegregation. The fact that there was no vacillation led to early unity.

On June 14, 1954, Superintendent John H. Fischer called a special meeting of the teaching staff to discuss the importance of the recently proclaimed action of the Baltimore School Board to eliminate racial segregation in September, 1954. In a stirring address, he urged that "we begin to rise above our past . . . [make] the American dream . . . more nearly true for more Americans."¹

There is no need here for retelling the moving way in which community leaders, pupils, teaching staff, and administrators in Baltimore cooperated to make desegregation operative. Numerous accounts have already recorded Baltimore's early progress and problems.² At this time—more than three years after desegregation—the need is to evaluate impartially what has accompanied the process of integration; to tell what has happened to teachers, pupils, and community during this period; to relate what answers are beginning to emerge and

what problems are coming to the forefront.

The Significance of Enrollment Changes. For the Baltimore Public Schools as of October 31, 1957, of a total enrollment of 159,727 pupils, 87,312 white and 72,415 Negro; 84,116 attended racially mixed schools. Every former all-white senior high school has some Negroes enrolled for the year 1957-58, nearly all such junior high schools have biracial enrollments, and most of the former all-white elementary schools have some Negroes enrolled.

It is important to note that about one-third of all former white elementary schools had remained solidly white up to October, 1957. Moreover, many of the former white schools (elementary and secondary) racially mixed in 1957 had acquired but small percentages of Negro pupils. In fact some of these schools had but a handful of Negro students. Except for a few schools, there had been no great upsurge of Negro pupils transferring to former white schools. It is also significant that not one of the former all-Negro secondary schools (and practically none of such elementary schools) had acquired any white pupils in the three-year period. Thus, important as are the enrollment changes in the three years after desegregation, in a large number of schools enrollments remained untouched or comparatively unchanged.

All these statistics indicate that city-wide enrollment changes, though not all-embracing, have been significant enough to justify the generalization that the desegregation decision has brought marked differences in the racial composition of schools.

The Inclusiveness of Education. Interestingly enough, but a few months before the Supreme Court Decision, an unofficial survey by the Maryland Com-

¹ Baltimore Department of Education, *Eliminating Racial Segregation in the Baltimore Public Schools*, p. 7, 1955. Published by Baltimore Public Schools. (Contains Dr. Fischer's entire address of June 14, 1954, and a record of School Board action.)

² Harry Bard, "A Baltimorean Looks at Desegregation," *Educational Leadership*, November, 1955.

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mission on Human Relations indicated that most of the city's white teachers believed there was not full readiness for desegregation. Yet when the administration and School Board supported the Decision of May 17, 1954, and took a clear and unequivocal stand, the full weight of the teaching force was placed on the side of desegregation. That so many teachers had so much faith in the right thing to do was a great tribute to the high morale of the staff and to the high calibre of teacher-administrator relationships in Baltimore.

That this was solid, confirmed support by the staff was evident from the opening days of desegregation in September, 1954. Sometimes it was dramatic support, as in the days of the limited school strike when white teachers and pupils made it clear that they would not tolerate the illegal procedures of rowdyism on the part of a few white pupils and parents, stimulated largely by outside influences.* But mainly it was the quiet, unpretentious professional support that is characteristic of the teacher.

Was this the support of the heart so well expressed by Superintendent Fischer in his address to Baltimore teachers on June 14, 1954 when he stated "... he who would serve as teacher in a democracy must be broadly inclusive not only in his sympathy but in appreciation of the good in all manner of men."³ Or was the support based on the experiences of teachers who had had the privilege of noting the success of biracial relationships in the entire teachers' in-service program,⁴ and in pupils' extracurricular ac-

tivities, such as Red Cross and Brotherhood Week programs.

Three years after desegregation no poll is needed to gather data on how the Baltimore teacher feels about the steps taken. There are many problems yet to be solved, and this article will deal with some of them, but most important of all, the big job has been done, and there is quiet pride in its accomplishment.

There are only schools now—not white, not colored. There are only children—yes, pupils with different IQ's, reading levels, ethnic, racial, and socioeconomic backgrounds; but all children, who might be in one teacher's class as well as in another's now. This in itself creates a oneness of the teaching force. Any teacher's problems can be every teacher's problems.

The Supreme Court Decision said little about the Negro teacher, but it is evident that in Baltimore his head is held higher because of desegregation. He is a teacher like the rest, with pupils who may be Negro or white but with problems and joys like all other teachers. The Negro principal is an administrator like others; his pupils may be predominantly Negro or racially mixed, but his is no longer a colored school. His administrative problems are those of interest to all principals. This fact alone has brought to the Negro teacher and administrator alike greater respect for their positions and, incidentally, a greater sense of responsibility.

Community Acceptance of Responsibility. Not just the self-respect of the

* Only a small percentage of the white pupil enrollment of the few schools affected actually went out on strike September 30-October 5, 1954.

³ *Eliminating Racial Segregation in the Baltimore Public Schools*, op. cit. p. 14.

⁴ There were over 50 in-service programs,

including activities related to subject areas and workshops in child study and community study, which gave teachers firsthand experiences with biracial and other intercultural activities. See Harry Bard, *Teachers and the Community*, National Conference of Christians and Jews, 1953, for data on the community-study program.

teaching force but that of the whole community rises with desegregation. It is the sort of community pride that comes from proving that people can work together. Baltimore actually had been proving this for a long time. Desegregated employment patterns in industry, in public transportation, and in government protective service had been quietly and slowly changing since the opening of World War II. There were changes in other racial restrictions. Hotel managers permitted racially mixed dinner meetings. Department stores abolished many credit restrictions on Negro trade. The leading concert hall and the city's legitimate theatre opened their doors to Negroes and permitted them to be seated anywhere in the buildings. The local governmental commission, the Baltimore Community Self-Survey of Intergroup Relations, summed up the city's change in the title of its 1955 report, *An American City in Transition*.⁵ Baltimore, steeped in Southern traditions long after the turn of the century, was gradually eliminating its racial barriers.

It is important to note that some of the Southern racial traditions still exist in Baltimore. For example, the moving picture houses are still generally segregated and restaurants, with but few exceptions, still serve only white persons. Leading hotels reserve rooms for Negroes only under special circumstances. Commercial recreational establishments, namely bowling alleys, dance halls, and swimming pools, are still segregated. Thus the phrase "progressive desegregation" rather than "full integration" would best characterize racial relations in the Baltimore community.

When the Baltimore School Board

made its decision to desegregate, not a single government official or community organization opposed the act. When desegregation was challenged by the school strike of September 30, 1954, within two days the Police Commissioner publicly stated that there would be strict enforcement of the laws referring to disturbing school sessions and referring to inducing children to absent themselves unlawfully. Enforcement officers were thus able to break up picketing and end the strike completely within three school days after the Commissioner's statement. Moreover, the studied but prompt decision of the City Superior Court judge on October 5, 1954, made it clear that local desegregation by the Baltimore School Board was fully legal. This decision left no legal basis for further disturbances.

At the first enunciation of the desegregation policy, a large number of religious, patriotic, fraternal, and service groups applauded the decision. The important aspect of this community support was that it represented all shades of opinion, from groups often labeled "conservative" to those sometimes called "starry-eyed." Support by the press, radio, and television was significant from the beginning but especially effective during the strike.

Desegregation was primarily a school matter, but the community in general took pride in its accomplishment. Had it not been proved that Baltimore could work out difficult problems and take a stand on the side of right and justice? The school's success was due in large part to the acceptance of responsibility by the community.

DESEGREGATION AND LONG-STANDING NEEDS

To hold one's head high in satisfaction that a right and fair stand has been taken

⁵ Baltimore Commission on Human Relations, *An American City in Transition*, 1955, Baltimore 2, Md.

is to improve one's vision. We can now see what needs to be accomplished, what lies ahead.

In general, desegregation has not brought many totally new classroom problems to Baltimore. It has, however, pointed up the importance of long-standing needs and concepts in American education. Among the requirements for teachers are those concerned with strengthening intercultural relations, understanding children, building staff morale, improving professional competencies, and working effectively with parents and community.

Improving Intercultural Understandings. The wide diffusion of school population has not only effected new racial groupings but has often brought children of varying socioeconomic and religious backgrounds under the same teacher. It becomes necessary then that teachers understand the social and cultural backgrounds of the children they teach and give attention to the mores that affect the lives of these boys and girls.

As desegregation takes place and Negro and white children go to school together for the first time, numerous cultural forces enter into the admixture. For example, in one Baltimore junior high school where the Negro school enrollment is 35 per cent, the 65 per cent white enrollment is largely Jewish. For most of these young people, the mingling of religious groups requires as many new understandings as do the new racial relationships. Since the elementary school experiences of these Negro pupils go back largely to the period of segregation, there were no contacts with Jewish pupils. Thus, for most of these Negro youngsters, the strangeness of going to school with white pupils is further com-

plicated by going to school with Jewish boys and girls.

What is true of youngsters in such admixture is equally true of teachers. For example, at this same junior high school, one Jewish parent spoke very highly of the Negro teacher who was in charge of his son's homeroom section, but at the same time was both amused and concerned by the morning exercises which had included singing the devotionals "Yes, Jesus Loves Me" and "Were You There When They Crucified My Lord?" When the teacher was approached on this subject, it was very evident that he had little understanding of the religious beliefs of Jewish youngsters since, as a product of segregated schools himself, he had never come in contact with Jews.

The Negro teacher in biracial situations is not alone in the need for deeper understanding of children. A white teacher recently declared to the writer that the most important lesson he had to learn in working with Negro youngsters was that he should not settle for too little. As a product of all-white segregated schools, he had grown up with the belief that Negro youngsters are inferior in ability. At first his assignments to classes predominantly Negro were meager and at a low achievement level. In talking with other staff members, he learned that his expectations were not high enough. Wisely, he stepped up his requirements and found that while some Negroes were slow learners others were gifted pupils.

For many white teachers, the need for understanding children of low socioeconomic backgrounds, belonging to mobile families, is as urgent as the requirement related to racial understanding. In urban centers like Baltimore, newcomers to the city make up a large portion of the school enrollment. This is especially

true of the Negro population, which has recently increased to almost 30 per cent of the total city population largely because of the influx from the rural South. As a result, white teachers are often faced with learning the culture of the mobile rural sharecropper at the same time they are learning the mores of Negroes. These multiple understandings make it especially necessary for white teachers not to stereotype the new Negro boys and girls. Actually, to many of the urban Negro youngsters from middle-class families, these mobile children are just as foreign as they are to the white teachers.

Many Negro teachers lack understandings related to ethnic backgrounds of pupils. For example, one Negro teacher recently appointed to a junior high school with practically an all-white enrollment complained that he was having difficulty pronouncing the names of his Jewish students. It so happened that practically no Jewish children were enrolled in the school. It turned out that his difficulties were with names ending in "ioso," "ski," "onka," and "adas" belonging to pupils of Italian, Polish, Czech, and Greek backgrounds. He knew little about these ethnic groups and almost as little about the Roman Catholic and Eastern Orthodox religions which play such an important role in the lives of these groups. The segregated schools which the teacher had attended as a pupil himself had not brought him into contact with such groups.

Even the best-intentioned white teachers sometimes err in dealing with interracial relations. On one occasion, a teacher called to the writer's attention the fact that he had made the strongest appeal to the lone Negro boy in his class by asking him to "Remember that the eyes of the entire school are upon every one of your actions. Whatever you do

for good or bad reflects on your entire race." This was a pretty heavy burden to place upon a young child. Moreover, no sociologist of merit would support the view that the actions of one person exemplify those of an entire race.

Negro teachers need to understand that they have picked up stereotypes about white youngsters just as white teachers have accepted stereotypes about Negro boys and girls. For example, it comes as a surprise to a few Negro teachers that there are some very slow white pupils. At times the reverse is true, and Negro teachers lack an awareness of rich cultural backgrounds in terms of trips, books, and personal contacts which pupils might bring to a new unit of work. This is especially true if the Negro teacher himself has not had these advantages.

Improving Child Development Understandings. Important as are the gaps in intercultural understandings which Negro and white teachers need to fill because of desegregation, yet even more important are those understandings which teachers as teachers (irrespective of race) need to have in dealing with children as children. These understandings are often pointed up at the time of desegregation, but actually the needs are ever-present. For example, one Baltimore teacher called the writer's attention to the need to observe the "islands within" that bring children of different races or religious groups or social backgrounds together in the same classroom, but often keep them apart on the playground, in the cafeteria, and in extracurricular activities.

On September 12, 1957, Dorothy Counts, a Negro high school youngster, left her North Carolina all-white high school because she "was all alone." Without minimizing Dorothy's personal problem, the problem of child loneliness is

pointed up for white as well as Negro youngsters at a time of desegregation. Moreover, this is an ever-present problem as related to children who are new to the neighborhood, pupils who come from different racial, social, and religious backgrounds, and boys and girls who just do not make friends easily. Dorothy stands as a reminder to teachers all over the country that the classroom needs to be hospitable to all children. She is also a reminder to teachers and pupils alike that they do have responsibilities to newcomers.

The problems of slow learners, culturally impoverished boys and girls, and poor readers exist apart from racial issues, though they are often pointed up by desegregation. In some school situations in Baltimore the problem has become more pronounced because of changed racial compositions. But the solutions are not those necessarily related to race. One Baltimore white teacher put it wisely when she said, "My new Negro boys and girls have had few opportunities to visit museums, hear good music, observe industrial processes firsthand, and see government in action. Only recently have community agencies been fully willing to include them in these opportunities. I'm going to see that they get these advantages."

Building Staff Morale. The high morale of Baltimore's teaching staff was the most important factor in desegregation. The continuance of this high morale at a time when many faculties, like student bodies, became biracial is a great tribute to Baltimore's teachers.

In Baltimore, teachers are appointed from graded eligibility lists which come into being as a result of examinations (National Teacher Examinations—Common Form), practice teaching, and interviews. Promotions are made from among

those who have proved their worth through superior performance on the job. Those who desire promotions must qualify through examinations (National Teacher Examinations—Administrators and Supervisors Form). The most capable and the best-qualified are appointed. Before desegregation, Baltimore had two eligibility lists—white and colored—and teachers were appointed from the two lists. With desegregation, common lists came into being.

The last three years have witnessed a racial intermingling of faculties in some school situations. How have the Negro and white teachers been received?

In general, Negro teachers have been received by white colleagues and pupils much as any other teachers. If they were beginning teachers, the first year for them has been one of the same joys and problems experienced by all new teachers. If they were experienced, effective teachers, they were received warmly by most principals, pupils, and parents, as are all good teachers.

White pupils have accepted Negro teachers on the basis of qualifications. As one white youngster put it, "The first week I saw my teacher as a Negro, but as I recognized how good he was, I got to see him only as a teacher. I never think of him any other way."

Negro teachers who enter predominantly white faculties are in practically total agreement that many of their colleagues lean over backward in accepting them. Some Negro teachers worry most about how they will be accepted in faculty social situations such as the lunch hour and the Parent-Teacher Association social hour. They admit that at times they are more sensitive about social situations than they need be, but remind white teachers that, in Baltimore, eating to-

gether was and still is the most sensitive situation in racial relations.

A few Negro beginning teachers placed with biracial classes indicated that they would have preferred that the first teaching assignment be with all-Negro classes. As one man, a graduate of a Negro college, put it, "This is my first year in teaching and my first contacts with white children. There are too many things to learn at one time." This situation should be studied by Negro colleges with education majors. Such colleges should afford their students more opportunities of a biracial nature and make it possible for them to observe and possibly do their practice teaching in biracial situations.

In general, those Negro teachers who have had interracial experiences as adults tend to be more at ease during their first year in teaching biracial classes. If their own educational experiences in public schools and colleges included association with white pupils, the adjustment is a good deal easier.

Baltimore has a number of white teachers who are teaching in schools which had an all-white student body in 1954 but which have since become predominantly Negro in population. Many of the white teachers in the latter situations want to remain in their assignments as the school enrollments change racially. As one teacher put it, "I've seen this school change and many of my attitudes have changed along with the school. I've learned to understand the Negro youngsters and now realize that in general they are much like white children."

Some white teachers ask for transfers when schools change racial compositions. Some older teachers have found the adjustment more difficult than others and have sometimes asked for transfers, usually giving "too far from home" or

other unrelated reasons for the transfer.

White teachers sometimes attach racial tags where they don't belong. For example, a white teacher in charge of the faculty committee said to her principal, "The new Negro faculty member is aggressive, like all Negroes." The principal reminded the white teacher that the Negro faculty member was a beginning teacher and wanted to show that she could do her part expeditiously. This was why she had worried the white teacher to get the program underway. Actually another beginning teacher who was white had made the same request. "Both are anxious to do well," said the principal. The white chairman of the faculty committee saw the point, smiled, and said, "If only these young teachers were not so impatient!"

On the other hand, some Negro teachers are overly sensitive. Some time ago a Negro teacher was criticized by the white chairman of a teachers' intercultural committee for handing in a paper that contained errors in grammar. The Negro teacher, in tears, came to the writer, who was also on the committee, stating, "She dislikes me because I'm a Negro." The writer calmed her down and informed her that he too had been corrected by this lady who was a perfectionist in English, but by no means anti-Negro. Actually, all three were working for an intercultural cause and the white chairman was an understanding, dedicated person.

Sometimes white teachers err in judging how well a Negro teacher will succeed with a mixed school assignment. The principal of a junior high school in an underprivileged industrial part of the city told the writer how hasty the white faculty judgment had been that his newly assigned Negro physical education teacher would be unsuccessful in this

all-white school. It so happened that this teacher's lack of cultural advantages was more than made up by his deep understanding of the problems of children of factory workers. He could talk their language.

Negro teachers often underestimate how well a white teacher will do in an all-Negro enrollment school. A year after desegregation a vacancy in a social studies department headship occurred in a senior high school formerly designated as a colored school and even in 1957 containing no white pupils. Best qualified for this position was a white teacher who had superior training in subject matter and methods and excellent ratings for his long years of experience. His grades on the promotional examinations were far above those of any Negro candidate. Most Negroes on the faculty concerned and teachers in general were pleased about his appointment, expressing satisfaction that the promotion had been given to such a highly qualified teacher. A few Negro teachers (and incidentally a few white ones) were concerned that the promotional opportunity had not been given to a Negro candidate. As one Negro teacher put it, "This promotion deprives us of an available opportunity. A white person would hardly know how to work with Negroes."

The white social studies head has now been in the school over a year and a half. He came with an excellent background in intercultural relations, having given freely of his evenings in volunteer work of an interracial nature. He knew how to work with Negro groups and had a good understanding of the particular neighborhood involved. He made an excellent adjustment and soon gained the respect and friendship of pupils and teachers alike. The principal of the school, when asked about this man said, "He has brought

new insights to the faculty and has been an excellent coworker."

Incidentally, the appointment gave substance to the view that after desegregation the best qualified person would get the job, irrespective of race. (As noted, some Negro teachers had been appointed to schools with predominantly white enrollments.) Moreover, the teacher concerned became a symbol that the school in mind was desegregated. Most important of all was the view that good teachers can adjust to various situations and make important contributions when they are understanding and sympathetic.

With faculty as with children, there must be continual emphasis on building staff morale. When a faculty becomes biracial, it is well for principals to take a second look at some of the beliefs they have concerning teacher-teacher and teacher-administration relationships. Is attention being given at the "feelings level" as well as at the problem level when dealing with interpersonal relations? Are all segments of the faculty—the young, the experienced, the older teacher—making contributions to the commonweal? Are teachers working together or operating as cliques? Are some members of the faculty only partially accepted? Do all share in important decision-making? Are individual competencies used to advantage? These and other questions are not new when Negro or white teachers enter the faculty for the first time, but such occurrences give school principals opportunities to review practices.

Strengthening Faculty Competence. As the Supreme Court Decision implied, "separate but equal" schools never operated effectively and thus, graduates of segregated public schools and colleges are impoverished in different ways.

Many of those who graduate from all-white schools lack full understanding of intercultural relations and many who attend all-Negro institutions lack rich content background.

Have there been any predominant problems in respect to the competence of Negro teachers? The one that stands out most is that related to speech. Poor enunciation and pronunciation are so prevalent among Negro candidates that it has been necessary to introduce a speech test in Baltimore as an additional qualification for entrance into teaching. Morgan State College, in Baltimore, which trains many Negro teachers, has become so keenly aware of this problem that the administration has recently introduced new speech requirements for those preparing for teaching. As colleges realistically face this requirement there will be general improvement along these lines.

Since desegregation and the existence of a single eligibility list, it has become evident that, in general, Negro applicants who have had their collegiate training in impoverished and inadequate institutions tend to do much more poorly on the exams (National Teacher) than other Negro or white candidates who attended colleges with higher scholastic standards. (It is important to note that the National Teacher Examinations make up but one criterion for placement on the eligibility list. Nevertheless, a minimum score is required on this test as it is for other areas, for example, practice teaching.)

The problem of teacher competence in subject matter and in instructional techniques is one that goes beyond racial considerations. Talk to any principal about shortages in mathematics, science, and industrial arts and he will tell you that sometimes he must accept teachers

who do not fully meet qualifications. Fortunately, for large cities like Baltimore, comparatively favorable salary schedules bring the more competent teachers. But even here, the problem of subject-matter preparedness is of real importance.

Desegregation has emphasized the fact that teachers are mobile and that their competence must be measured in terms of teaching requirements anywhere in America, if they are to be fully qualified. Thus all colleges offering courses in teacher education must have strong programs that prepare their graduates to teach in all parts of the country, including places where pupils have rich cultural backgrounds.

Working Effectively with Parents.

The deepest concerns which white parents in Baltimore felt regarding desegregation were those related to health and social contacts. In fact, it was predicted that the most explosive areas would be those related to sports. When desegregation first came, the choice of opponents was left to each school, with no administrative compulsion. Without exception predominantly white schools included Negro schools in their schedules. At first the scheduled competition was largely in the non-contact sports, such as bowling, track, golf, baseball, and tennis. Later, such schedules included the sports involving contact, such as basketball, football, wrestling, and finally swimming. There have been no major incidents of an interracial nature growing out of any competitive contest since these steps were taken.

Moreover, it should be noted that as school enrollments changed, Negro athletes assumed important positions on school teams predominantly white. Mutual respect and understanding have grown out of these athletic situations.

As for social affairs, schools, in the main, have continued their school dances and parties. On a few occasions they have had to reschedule such activities because of hotel restrictions, but in most cases hotels and caterers have changed policies to accommodate school functions. When Negro youngsters attend such affairs, they bring their own dates and follow the customs of the city, dancing only with members of their race. Formerly popular Paul Jones and square dancing have been abandoned because of possibilities of mixed dancing.

Slowly, but in increasing numbers, Negro parents have joined Parent-Teacher Associations in schools that have become mixed racially. The fact that the Council of P-TA's in Baltimore had long brought together parents of both races helped white and Negro parents to feel comfortable in such situations, although at first some P-TA's in biracial schools felt that the officers needed to be representative of all groups, irrespective of individual abilities. (This was probably a valid point of view at the beginning in order to make all feel they were welcome.) More recently, the generally accepted view is that the most capable persons should hold office, providing they possess an understanding and acceptance of all groups represented in the school.

In talking with Negro parents in some racially mixed schools, the writer found that their concerns were largely in three areas. First, they were worried about whether their children would be fully accepted when desegregation came. On this score practically all parents had nothing but praise for the teachers and administrators. Their second concern was whether their children would be able to meet "the stiffer competition" and whether they as parents would be able to help them with school work.

Here some mothers and fathers needed to be assured that teachers know how to deal with various ability groups and that in general parents can help best by encouragement and by providing a good study environment, rather than by personally assisting with home study. The third concern was related to racial composition of members of the teaching staff. Many Negro parents whose children attended a racially mixed school wanted their boys and girls to be taught by white teachers. As one parent put it, "Our children left a segregated school and only white teachers will bring the full advantages of desegregation." As can be noted, teachers and principals need to work individually with parents and with P-TA groups as a whole to dispel some wrong notions.

As for white parents in a racially mixed school situation, they have, as noted, been mainly concerned about social relationships which their children might have with Negro youngsters. These concerns have largely been dispelled, though principals need to be continually sensitive to the fact that this area is related to the most deep-seated mores.

Relating School to Community. In general, school enrollments reflect the racial residential pattern of the neighborhood. In Baltimore as in many other Southern and border cities, there are some neighborhoods with large Negro populations, mainly in the center of the city; however, there are small Negro housing settlements in practically all sections of the city. With this population pattern in mind, it is easier to understand why most of the former white elementary schools now have some Negro students and why for most of them the percentages are small. The Baltimore housing patterns also explain why all but two of the fifteen former white junior

high schools in the city have some Negro pupils enrolled.

Most of the senior high schools are regional schools, covering large sections of the city, rather than neighborhood schools. Negro enrollments in most of the former white high schools make up but a small portion of the total populations. Since there is no *districting* policy, the nature of the school determines the enrollment. For example, some Negro youngsters travel across town (as do some white pupils) to be able to attend the all-boys' technical high school, formerly white. Others travel long distances to go to the two all-girls' schools, which were formerly for white students only. Most of the Negro youngsters prefer to go to the high schools in their own areas; thus the three former all-Negro schools are still crowded. Incidentally, practically no white students have enrolled in these three schools, since they are in almost solidly Negro housing areas. The few white students who live near these schools prefer to travel across town to attend the predominantly white high schools.

The general policy in Baltimore is not to define districts for school attendance; thus the system opens all doors in schools without regard to race, but it seeks to avoid any action which deliberately forces pupils together to create mixed racial enrollments. The Baltimore policy rejects forced integration for the same reasons that it rejects forced segregation. The school authorities consider it wrong to manipulate children for any reason based on race.

The fact that Baltimore's Negro population is growing so rapidly has had a significant effect on the racial composition of the school enrollment. For example, in October, 1957 Negro boys and girls constituted approximately 50 per cent of Baltimore's elementary school enrollment

and over 35 per cent of the secondary school population. The disparity between these figures and the nearly 30 per cent Negro population of the city lies partly in the fact that Baltimore has a large Roman Catholic and private school enrollment which is almost entirely white, and partly in the fact that the Negro community has a higher percentage of children of school age than does the white population.

Table I indicates the effects of rapidly changing neighborhoods on school enrollments. Note how rapidly Schools B, C, and D moved from biracial enrollments to ones nearly totally Negro. The changes evident in these schools indicate that once a school reaches 40 per cent Negro enrollment, it is reflecting neighborhood housing changes that are accelerating so rapidly that in a few years the enrollment will be practically all Negro.

An interesting phenomenon in connection with racial changes brought on by rapidly changing neighborhood patterns may be noted by School B in Table I. In June, 1954 the school was an all-white segregated school. From September, 1954 to October, 1957 it was desegregated, with increasing Negro enrollments. By January, 1958 it was virtually all-Negro in enrollment, and thus segregated again. The full cycle of segregation-desegregation-segregation had taken place in less than four years.

Since elementary schools are neighborhood schools, these rapid changes are most evident at this level. However, as a number of neighborhood changes merge and affect an entire region, the changes in turn bring about significant differences in junior high school enrollments (see schools E and F in Table I).

It is evident from Table II that where Negro enrollments are small they tend toward stability.

TEACHERS COLLEGE RECORD

TABLE I

ENROLLMENT IN SCHOOLS WHERE RACIAL COMPOSITION IS CHANGING RAPIDLY

School	Enrollment as of October 31											
	1954			1955			1956			1957		
	N†	W	%N	N	W	%N	N	W	%N	N	W	%N
A*	36	399	8.3	116	311	27.2	226	277	44.9	348	236	59.6
B	104	152	40.6	240	70	77.4	387	30	92.8	1223	50	96.1
C	367	362	50.3	605	205	74.7	843	118	87.7	1072	79	93.1
D	128	833	13.3	299	711	29.6	761	505	60.1	1160	325	78.1
E	12	2504	0.5	154	2689	5.4	508	1534	24.9	749	1212	38.2
F	34	2029	1.6	134	1848	6.8	630	1490	29.7	1305	847	60.6

* Schools A through D are elementary; E and F are junior high.

† N = Negro; W = White.

TABLE II

ENROLLMENT IN SCHOOLS WHERE RACIAL COMPOSITION IS STABLE

School	Enrollment as of October 31											
	1954			1955			1956			1957		
	N†	W	%N	N	W	%N	N	W	%N	N	W	%N
A*	5	358	1.4	13	404	3.1	20	404	4.7	38	401	8.7
B	5	718	0.7	3	677	0.4	8	673	1.2	17	653	2.5
C	26	1737	1.5	78	1494	5.0	81	1506	5.1	88	1465	5.7
D	2	1786	0.1	1	1863	.05	3	1928	0.2	1	2103	.05
E	9	1048	0.9	18	762	2.3	26	785	3.2	23	842	2.7
F	30	2496	1.2	51	2516	2.0	74	2650	2.7	92	2866	3.1
G	3	1626	0.2	16	1647	1.0	20	1659	1.2	27	1684	1.6

* Schools A, B, and C are elementary; D and E, junior high; F, senior high; G, senior high vocational.

† N = Negro; W = White.

In fact the first year of desegregation brought negligible changes in those school situations where there were few Negroes in a neighborhood. Most of these Negroes elected to remain in the schools which they had attended the previous year even though a former white school was closer to home. By the second year, however, these few Negroes tended to enroll in the nearest school, especially if

they had just graduated from one educational level, the elementary school, for example, and were ready to attend the next level, the junior high school. These pupils were joined by a few other Negroes from various parts of the city who, because of Baltimore's no districting rule,* could follow their inclination and

* In a few areas schools are districted. Pupils are kept from enrolling in these schools unless

attend a predominantly white school. By the third year of desegregation, Negro enrollments in these schools, located in predominantly white areas, seemed to stabilize at percentages slightly above the number of Negroes in the neighborhood.

Changes in community patterns and in school enrollments necessitate that teachers and principals become sensitive to the rates of change and to accompanying problems. A junior high school principal in a changing neighborhood put it very aptly when he said, "I need to be aware of the concerns of Negro and white groups and yet have a disinterested viewpoint. My school has become the bridge that carries the neighborhood through this period of change. Often the fact that Negro and white youngsters get together in my school voluntarily is proof to the neighborhood that they can live together."

In recording his observations of significant contemporary changes, the

they live in the designated district. However, those who do live in the district are not forced to attend the school there; they may enroll in any non-districted school in the city.

writer might well take note of the historian's caution that *it is difficult to get a true perspective of an event when one is so close to the occurrence*. Little more than three years have passed since the Baltimore School Board's decision on desegregation became effective. It may well be that men in other times and other places will see in the changes that have taken place in Baltimore heroics and problems which this observer did not note. Certainly other persons in the Baltimore environment might have selected other points to present.

The writer has looked at the scene, noted what he saw, and concluded that, for Baltimore, the first three years, while they admittedly have been a period of transition, on the whole have been successful. In general, teachers and other citizens alike are glad that the step has been made. They take pride in developments. They are somewhat concerned about living up to all the publicity accompanying "Baltimore's Progress," and hopeful that during the years that lie ahead they may work diligently on the yet unsolved problems.

The Self-Contained Classroom: An Assessment*

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IN THE days of the one-room school it was taken for granted that a single teacher would teach all subjects to all the children attending—beginners through eighth graders. Once schools in towns, cities, and counties grew into multiple classroom units, arguments began regarding best ways to organize them. One group of educators has sought consistently to preserve the values seen in having one teacher take major responsibility for a single group of children all day long. A label frequently applied to this arrangement is the *self-contained classroom*.

Caswell and Foshay are two curriculum specialists who strongly approve of placing responsibility with one teacher. They write:

The best basic unit of organization yet devised is the self-contained classroom in which a group of children of similar social maturity are grouped together under the extended and continuous guidance of a single teacher.¹

Opponents of the self-contained classroom fall into two categories. There are those who object to the literalness with which the concept has been applied in some schools. For example, one experienced elementary school teacher writes:

The self-contained classroom in my estimation is a misnomer, if one is to adhere to a literal interpretation. I feel that a so-called self-contained classroom contains no more than a possibility of better unifying the learning pursuits. It cannot and should not contain more. It is home base for the exploring and discovering children and teacher. When there is a continuous reaching out, as there must be, for resources, ideas and people, it is the collecting place. How deadly would be the classroom which would contain all that the children were supposed to work with! Learning is searching and discovering (not always what one sets out for, since every learner is a Columbus) and succeeding and failing.

The self-contained classroom is home base for organizing, evaluating, and intellectualizing experiences. It is the place where learners hang their hats if their job can be

Edition (New York, American Book Company, 1950), p. 323. These authors give a full discussion of various plans of organizing the elementary school, pp. 315-30, including a useful bibliography. See also Muriel Crosby, *Supervision as Co-operative Action* (New York, Appleton-Century-Crofts, 1957), pp. 253-55, and Beatrice Davis Hurley, *Curriculum for Elementary School Children* (New York, Ronald Press, 1957), pp. 91-93.

* Professor Miel has written much in the field of curriculum and teaching. Among her publications are *Cooperative Procedures in Learning* (Bureau of Publications, Teachers College, Columbia, 1952) and, with Peggy Brogan, *More Than Social Studies* (Prentice-Hall, 1957). Formerly president of the ASCD, she is currently chairman of the Publications Committee (1957-59) of that organization.

¹ Hollis L. Caswell and A. Wellesley Foshay, *Education in the Elementary School*, Second

done there or can be organized and planned there. In this concept of the self-contained classroom I do not fear limitations, a setting apart, and social isolation which I have observed in practice in some schools.

Education of children is made up of many things. It cannot be accomplished by one teacher. Neither can it be done well by isolation of classrooms within schools or isolation of classrooms from the community. The self-contained classroom is best seen as a deterrent to fragmentation and lack of organization in the learning experiences of children. It gives focus to the on-going educational process, which should continuously tap a variety of human and material resources.²

Educators who subscribe to the ideas presented by the foregoing statement do not object to putting children under the guidance of one teacher for most of their school-sponsored experiences but they do object to practices which seem to cut children off from contact with other teachers and specialists, other children, and school or community facilities outside the classroom.

A second group object to the self-contained classroom because they would like to see elementary school children taught by an array of specialists in various subjects. Educators in this group have developed various proposals for providing children with specialized teachers. Since they usually are seeking the least expensive solution to the problem, these educators fashion their plans around some form of departmentalization. It would be fair to say that such plans appeal greatly to the citizen group which sees only that facilities and space in a school building are being used 100 per cent of the time. For example, no classroom remains empty while a group of children is out working in the library or

having a game period in the gymnasium. These citizens often are not aware that while facilities are being used on such an apparently efficient schedule, there may not be corresponding efficiency in learning on the children's part.

In a period of national emergency, such as finding the Soviet Union ahead in the missiles race, people often blame the schools for the predicament they are in and at the same time look to the schools to get the problem solved in a hurry. In the current welter of produce-scientists-quick schemes, the elementary school is on the receiving end of its share of advice, some wise, some questionable.

Two school systems already are co-operating with a university to experiment, under foundation subsidy, with an organization of the elementary school whereby language arts and social studies are to be taught in typical grade groups for part of the day, but the children are divided, for the remainder of the day, into homogeneous groups cutting through the grades vertically. Mathematics and science as well as physical education, music, and art are to be taught in the vertical ability groups. Whether this is a response to Sputnik or to the concerted drive to give special attention to the gifted is not clear. However, because many schools are meeting pressures to adopt all kinds of proposals directly challenging the concept of the self-contained classroom and because numerous schools have never yet achieved this type of organization, it seems timely to assess the idea as to both potentialities and actualities.

POTENTIALITIES OF THE SELF-CONTAINED CLASSROOM

In deciding upon a plan of organization, it is sensible to study both the opportunities opened up and those closed

² Kathryn A. Smith, formerly on the staff of University School, Kent State University, Kent, Ohio (unpublished manuscript).

off by the pattern chosen and then to make a judgment on the basis of probable gains and losses in learning efficiency. In other words, lacking research evidence based on carefully controlled comparative studies, our next best step is to *predict* (theorize) on the basis of what we know from research in child development and learning. The validity of such predictions is increased by observations of educators who have worked in both the departmental and the self-contained type of elementary school organization.

The possible contribution of the self-contained classroom to efficiency in learning may be examined with respect to (1) mental health factors, (2) use of time, and (3) availability of resources and facilities.

Mental Health Factors. It is a generally accepted fact that efficiency of learning is promoted when children's schooling is carried on in an atmosphere conducive to mental health. It is very important that a child have the help of a sensitive, accepting adult in assessing his strengths and weaknesses and in setting his aspiration level with respect to various facets of intellectual, physical, and social achievement. It is important that an adult who matters as much to a child as does a teacher have a chance to know the child as a total operating individual, not just as a learner of arithmetic, a reader, a speller, or a singer.

In a departmentalized setup it is hard for a child to qualify with the teacher of arithmetic if he is poor in that area, even though he may be adequate or even gifted in art or writing. To balance success and failure in one's school life, and to make constructive use of both, require guidance during the growing years by a sympathetic teacher who knows each

pupil well and who has responsibility for few enough children to be able to care about each member of his class as a complete, learning person. The self-contained classroom gives the teacher opportunity to provide the kind of teacher-pupil relationships which foster mental health.

It is crucial also that a child feel that he belongs to and can help to shape the important school group that is his class. In a departmentalized school, the same children may stay together throughout the day as they change from teacher to teacher. However, it is difficult for a group to build a healthy, supportive esprit de corps when the status leadership changes every hour or so and, with it, expectations, standards, rules, and preferences change. Even if there were time on the specialist-teacher's agenda to help the group to work out cooperatively with him agreements under which the children were to operate in his class, it would be putting a great burden on a young child to help his group shape and live by so many different operating formulas daily. Later on, when the children are older, they can much more easily take on the task of responding to differences in leadership. In the self-contained classroom children work and play together in many different kinds of relationships under the eyes of one adult. They have a chance to learn about one another's potentialities and limits with the help of a person who is in a position to know and care about whole persons. Working out from a firmly grounded, consistently led home base, the children can begin gradually to take on learnings about how other adults are with children.

An important ingredient in mental health, and therefore in learning, is good feelings toward self and others. Developing these feelings can realistically be on

the agenda in the self-contained classroom. Attention to feelings and active work in promoting learning along this line are not the charge of, nor are they made easy for, the teacher meeting a succession of different classes throughout the day.

Use of Time. One of the greatest advantages of the self-contained classroom is the economy in learning afforded. This economy is effected in several ways. An important factor is the possibility of working on several goals at once. For example, while the teacher is helping children with social studies, he can also be helping them improve in reading skills. Knowing where his children are in various aspects of the task of learning to read, the teacher can reinforce certain skills when the children are working with written science materials or searching for an answer to a timely question arising in that no man's land belonging to no subject in particular. Helping children with spelling and correct written expression in connection with all subjects is the responsibility and opportunity of the coordinating teacher, whereas the departmentalized teacher often finds that children expect to write and spell correctly only for the English teacher.

The teacher in the self-contained classroom can work simultaneously on other goals also. Helping children advance in social learnings such as considerateness, justice, and critical thinking can proceed during snack time as well as during a writing time, during an art period as well as during a discussion in social studies. Helping children develop competence in personal-social problem solving is the sort of teaching which falls between teachers in a departmentalized school. The possibility of cutting across subject boundaries is essential for finding

the time and creating the situation in which learning can take place through experience in solving real problems involving values.

The coordinating teacher can also study to see where each of his pupils is in a whole array of learning tasks. He can see where a child does and does not take responsibility throughout the day, to what extent he follows through on his own, and what his tempo and his fatigue patterns are at different times in the day. In other words, the coordinating teacher can know a great deal about his pupils' learning. Furthermore, he can help them learn more about their own learning and how to improve their efficiency in learning as a result of study of the total pattern of each child and the variations within it. The teacher in the self-contained classroom is not so likely to fall into the trap of expecting a child to work "up to capacity" simultaneously in each curriculum area as is the departmental teacher, who sees the child only in relation to his own area. Helping children become self-directed learners who can help to make realistic plans for themselves can be on the agenda of the self-contained classroom in a way that it cannot be in the departmentalized school, where responsibility for such pervasive learnings is everybody's business and therefore nobody's business.

A definite and appreciable advantage of the self-contained classroom from the standpoint of economy in learning is flexibility in use of time. To make a further comparison with the departmentalized school, the teacher of a subject has so many minutes each day to devote to that subject with a given class and each individual in it. Where one teacher is responsible for coordinating all the learning of one group of children, he can arrange a time schedule according to his

judgment and that of the children as they plan from day to day and week to week. On occasion, an extra five or ten minutes spent on arithmetic will clinch an explanation, whereas carrying over the lesson to the next day may mean almost starting over. A child who is in the middle of creating a story need not stop for arithmetic, and on another day may spend twice as long on arithmetic as the other children do. The teacher in the self-contained classroom may provide a block of time when children may work on different academic skills, each apportioning his time as best suits his learning rate in different areas.

The advantage of the self-contained classroom when it comes to carrying out studies or units cutting across subjects, or planning and scheduling trips and the use of resource visitors is no small one either. In short, where the departmentalized school is set up for working on separateness, the self-contained classroom is organized to allow time and opportunity for integrating and generalizing.

Availability of Resources and Facilities. The trend in school building design in recent years is to make the elementary classroom as self-contained as possible from the standpoint of entrances, lavatories, drinking fountains, and sinks with running water for such purposes as art work, science experiences, flower arranging, and general cleanup. This has allowed teachers to put to better uses the time formerly spent in policing corridors and lavatories, supervising lines at the drinking fountain, and dealing with the petty, school-made problems caused by schedules which deliberately overtaxed facilities at certain hours and underused them at others. The modern trend has saved time for children that they formerly spent waiting in line for various

facilities or carrying pails of water to and from the classroom.

The ideal self-contained classroom is equipped also with such things as record players, maps and globes, and reference works, for time is wasted and enthusiasm for learning is dampened if teachers and children have to borrow such items back and forth. Also available in the ideal classroom is the wherewithal for certain music, art, science, and number experiences, and an adequate revolving classroom library, including children's magazines and newspapers. The time schedule allows for exploring the uses of such materials and therefore for some highly individualized learning.

REALITIES OF THE SELF-CONTAINED CLASSROOM

In actuality the self-contained classroom may live up to most of the potential just outlined. On the other hand it may not. The teacher may not be as approachable as one or more of the departmental teachers. He may not use his golden opportunity to know his pupils as total operating persons, while a departmental teacher having a child over a period of two or three years may come to know considerably more about him than his learning curve in the one subject. The teacher in the self-contained classroom may not help his pupils develop realistic self-confidence based on examining all their strengths. Creating a situation in which a teacher has a better *chance* to contribute to the mental health of his pupils is not a *guarantee* of this result. The solution is not, however, to take away the possibility. It is as if we were to say, "Some mothers do not furnish the mother love we believe so necessary for a good start in life; therefore, we shall not allow any children to have mothers!" If a type of organization has

more promise for accomplishing certain goals (better mental health, more integrated, more complete learning), then our best course is to work toward the realization of the potential that is there.

The same may be said for use of time. In some self-contained classrooms there is as much compartmentalization of subjects as in a departmentalized school. Putting one teacher in charge of the complete school day of a child is again no guarantee that he will make use of opportunities for helping children maintain continuity in learning. The intelligent course, however, is to continue a type of organization which invites and facilitates interrelatedness and attention to learning that falls between subjects and that makes it easier for a teacher to provide for all the ways in which a child may learn differently from his classmates.

The self-contained classroom may be more barren than the classroom set up for intensive experiences in one subject but it need not be so. If it is properly equipped, there are materials at hand for expressing ideas in social studies through art media or music, there are maps which may be used in arithmetic or science as well as geography. In short, materials are not departmentalized.

PROBLEMS TO BE FACED

All of the foregoing discussion comes under the heading of turning potentiality into actuality, a worthy if difficult goal. Other problems which must be discussed in assessing the self-contained classroom are: (1) misuse of the idea, (2) use of specialization, (3) teacher load, and (4) bases for forming a class group.

Misuse of the Idea. Certain economy-minded individuals have rendered a disservice to the idea of the self-contained classroom by interpreting it literally and using their interpretation as an excuse to

dispense with the services of art, music, physical education, and other specialists or to maintain only a slender staff of consultants in these areas, insisting that the classroom teacher do all such teaching. Following the same line of reasoning they plan buildings with no central library, no space where two or more groups of children might be comfortable as they work together, no room for expression through body movement, no center where children might find equipment that would challenge them beyond the limits of the classroom. Thinking of the classroom as an isolation ward in charge of one teacher ignores the growing complexity of the world and how increasingly difficult it is for a teacher to keep up with the many developments which his pupils have a right to pursue as part of their organized education. As has already been pointed out in this article, no teacher can be all things to all children.³ There is need for some way to bring specialization to bear in elementary education while retaining wholeness. Fortunately we need not choose between two extremes—on the one hand, a self-contained classroom with no specialized help for the teacher and, on the other, a departmentalized setup with all specialization and little or no provision for integration. We can add to the promising features of the self-contained classroom the advantages of specialization to supplement whatever specialization the teacher himself has been able to develop in the various curriculum areas common to the elementary school.

Use of Specialization. Furnishing supplementary specialization incorporates a number of problems in itself. What specialists are more essential for the elementary school? Is the answer the same for all schools? Where and how shall the

³ Smith, *op. cit.*

specialists work? What should be the specialization of the classroom teacher?

For school systems which cannot afford an array of specialists in addition to regular classroom teachers, the "home base" teachers, together with whatever leadership they have, must perforce develop and share various specializations among themselves. More than that, the sharing must be done in such a way that the basic, integrating values of the self-contained classroom are not sacrificed.

In schools which can afford a certain number of specialists in addition to a teacher for each self-contained classroom, a useful principle to follow might be to provide specialists for all areas in which it would be desirable to have a specially equipped laboratory or service center to supplement classroom learning. On that basis there should be a librarian to take care of a central library collection as well as to help children locate materials, learn library skills, and develop a love for reading. The librarian would be available also to go to classrooms on occasion and to serve as a consultant to teachers as they attempt to do their part in fostering library learning.

Similarly, a school might have a laboratory for arts and crafts which might include a sewing center, perhaps a separate center for woodworking, a science laboratory, perhaps a separate center for cooking, possibly a music center, and a center for physical education and recreation as well as a health center. All would be manned by appropriate specialists. To increase an elementary school staff in this way would reduce the excessive load of the classroom teacher at this level. The opportunity to send an entire group, a small group, or an individual to work in the service center, or to secure the help of the specialist to work alongside the teacher in the classroom or take

over the group by himself on occasion could mean real relief for the overburdened classroom teacher. It could help with the problem of providing special experiences needed by different children—the so-called gifted, yes, but all the others also, for each one has potential deserving of development.

For curriculum areas not requiring special service centers, the school principal and general supervisor may take responsibility for keeping up with new methods and materials and frontier ideas in order that they may supplement the competence of the classroom teacher in these areas. The suggestions and assistance of the specialist, who has time to keep up with developments in one or a few curriculum areas, can be of real help to the teacher in the self-contained classroom. Such an arrangement seems to be the only adequate one for meeting two important goals—maintaining continuity in the total learning of individual children and providing the specialization which can lead children as they reach out beyond the point where it is reasonable to expect any one teacher to be.

The classroom teacher himself must be a specialist of three kinds. First, he must specialize in child development and learning, particularly of the age group or groups he teaches and he must study his own pupils carefully. Second, he must keep on learning as much as he can about the areas which can best be handled in his classroom and in integrated fashion. Third, he must specialize in coordination. This means that he must gain as much familiarity as possible with the best thinking on the elementary school curriculum as a whole, he must continue to learn how to plan and evaluate with other adults and learn from them, he must study how and when to bring outside resources to his group and when to hold

them back, and how to help children tie together their learning from different sources. The theory of the self-contained classroom assumes, as much as anything else, that the time of the children and teacher cannot be demanded by any specialist.

Teacher Load. The staggering teacher load mentioned in the previous section results from a number of developments. Because the teacher in the self-contained classroom is considered responsible for all learning experiences of his children throughout the total school day, many have assumed that he must be present at all times, whether or not a specialist is actually teaching the group. There is a certain amount of justification for this view. If the teacher always absents himself or buries himself in paper work whenever a special teacher takes over, he is showing the children that this experience of theirs is not important to him. The teacher who does not become involved with the children in their experiences with specialists is not advancing in his knowledge of the special field and so remains as highly dependent on the specialist as before. Furthermore, he is in a poor position to carry on from where the specialist leaves off.

Nevertheless, a teacher who remains with a group throughout the day has no time during those hours for planning by himself or with other teachers, keeping records, conferring with a parent, gathering materials, writing reports, taking care of a multitude of clerical details that seem to plague every teacher, and getting a few moments of rest away from the children. In many schools teachers must eat lunch with the children in order "not to miss out on" the educative possibilities here. In addition, the teacher is expected and wants to participate in curriculum improvement activities for the

building and the system and in parent-teacher activities and other community affairs. The elementary school teacher expects to lead a busy life and to do school work out of hours. However, the burden for many has become excessive and the quality of human relationships and teaching suffers as fatigue and tension mount.

Industrial research has shown the value of short breaks for workers. The demanding work of the teacher would seem to require relief periods for that individual as well. It seems that no way can be found to give the teacher of a self-contained classroom a free period now and then through a week without taking him away from his group of children part of the time. Staffs have worked out different ways to take care of the children while the teacher is out of the group. Among others, leaving children in the hands of a specialist for *part of the time* seems feasible. By careful planning the teacher can avoid missing all of the time any one specialist might have with his children and thus can keep up with his children's progress in each field. Planning with the specialist is required whether the teacher and specialist are to function as co-teachers for a time, whether the teacher is to be an observer on an occasion, or whether the teacher is to absent himself for a short time, leaving the specialist in charge. The teacher must be prepared to help the children move ahead in the area represented by the specialist as well as help them integrate new learning with old.

Time for planning with the specialist remains one of the knottier problems in childhood education. Departmentalization only heightens the problem, for exaggerated compartmentalization of children's experiences creates a bigger need for co-operative planning at the same time that

it fractionates responsibility for it. Furthermore, without a situation in which there is a sturdy whole (many common group experiences and strong threads of individual continuity in learning), participation of the children in planning best uses of specialized resources is not practical.

The self-contained classroom creates a situation where teacher and children can plan together for the coming of a specialist and can plan with the specialist to the extent desirable. Such cooperative planning can be made part of the children's education in learning how to learn—in this case learning how to use the expert.

Another knotty problem related to specialization in the elementary school is use of laboratories or service centers. Should they be available for the individual child who wishes to explore an area in ways and in depth different from the rest of his class? Should children have the right to choose one facility at the possible expense of others? Will they tend to specialize too early and perhaps never explore an area which might have proved to be of interest and use if given a try?

A reasonable position would seem to be that the elementary school should continue to provide for the common learnings and the general education of all children. This would include helping the children to have pleasurable and successful contact with various special areas which lend richness to living. With increasing specialization in the modern world, however, there is no excuse for holding back the child who can obtain a broad and more than adequate general education and still have enough time, energy, and interest to pursue one field more deeply—the beginnings of specialization as it were. For purposes of both

a broad general education and early specialization, resource persons and facilities are desirable. Cooperative planning of principals, teachers, children, and consultants should solve the problems of scheduling the specialized areas of any one school to the best advantage of the children. This planning, of course, must assume a fairly flexible schedule within the self-contained classroom and sufficient supplementary resources to make "on-call" scheduling possible.

Formation of Class Groups. Frequently it is assumed that the self-contained classroom will be restricted to one grade or age group. When this policy is followed, school authorities sometimes recognize the contacts from which children are thereby excluded and provide appropriate remedies. Exchange of classroom visits, part- or all-school assemblies, a school council with supporting all-school committees, and school projects which bring pupils from different classrooms together—all are available as means of giving children contacts with other than their own classmates.

Another possibility is to create a group with planned heterogeneity—age differences of two or three years, difference in size, academic ability, and social development. Within a group planned so that ranges will be realistic but not too extreme for most teachers to handle comfortably, a multitude of combinations are possible. At different times during the day, through his own choosing or through teacher guidance, a child can find himself in homogeneous groups formed and re-formed for various purposes. In such a classroom a child can have the safe feeling of being supported by likeness while at the same time he may be challenged by the differences around him, inviting him to try something new, aspire to a new level, or just

take comfort in discovering the many ways there are to qualify in this world.

SUMMARY

The self-contained classroom, as our teacher-writer stated in the beginning, is in a way a misnomer. Few would propose seriously that children be isolated with one teacher day after day. Most see the value in supplementing the teacher's and the classroom's resources with other people and other materials and facilities. However, the need for a home base or coordinating center for the elementary school child is so great that this feature should be retained and all new proposals for elementary school organization should be tested against gains or losses in integration and continuity in learning. As the concept of the self-contained classroom is expanded to encompass supplementary specialization, it may be well to

devise a new term. Perhaps we might rename the home base the coordinating center and name the teacher in charge, as we have in this article, the coordinating teacher.

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Education and the American Political System*

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PRESUMABLY most of the readers of this journal are students of education. From the perspective of such study, the patterns and processes of American politics may seem very important, but not always properly attuned to the "best" interests of American education.

This discussion is an attempt to reverse the glass, to look at American education from the perspective of a student of government and politics. First, the place of education in the governmental organization will be examined; second, some comments will be made about education and educators in the political process.

EDUCATION AND GOVERNMENTAL ORGANIZATION

To a political scientist, one of the most basic concerns is organization. In all arrangements for governing, power, or influence, or authority is divided among individuals and groups. In the American system of government the power to govern is more widely divided and dispersed

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than in most governmental arrangements. This is as true of education as an activity of government as it is of most others. Responsibility for education is divided between government and non-government and, within government, is distributed among a great variety of units and agencies and organizational devices.

Governmental power can be divided in many ways. Among others, it may be divided into functions, levels, and agencies.

Function. What is the place of education as a *function* of government? It is comparatively new in age and tradition. In these respects it does not rank with international relations, defense, police, the adjudication of disputes, and probably not even with the care of the poor or with the construction and maintenance of various public works. Although fewer things, comparatively, are done through governmental channels in this country than in many others, governmental activities now use about 27 per cent of the national income, leaving 73 per cent for non-governmental activities. Although education as a function of government has a shorter history than some others, it bulks very large in terms of the proportion of governmental funds and manpower presently devoted to it. Part, of course, of the educational effort

and activity of the country is in the non-governmental sector, but the larger portion of our educational effort is through the channels of government.

Education ranks very high among the activities of government. Only national defense absorbs a larger portion of governmental resources. Somewhat more than half of our entire governmental effort, as measured by expenditure, goes into international relations and national defense. Currently, of about \$50 billion remaining for domestic and civilian activities of government in this country, education uses about \$12 billion. Highways and transportation rank next among domestic governmental functions, but the appropriation for them is only about half as great as for education.

Although education is one of the newer activities of government, its relative importance as a function of government, as measured by expenditures, has been declining rather than increasing during this century. This decline has been caused almost entirely by the massive growth in importance and cost of the defense-international relations function. Omitting defense and international relations, the share of governmental expenditures going to education has varied up and down somewhat but has not changed substantially during this century. The cost of education has gone up greatly, but no more rapidly than the cost of other things done by government, and much less than the cost of defense.

Just as education is the biggest domestic user of governmental funds, it is also the biggest domestic employer of people. Approximately two million of the seven million civilian employees of government in the United States are engaged in the function of public education. No other domestic function is even

a close competitor; only the defense program, using both civilian and military personnel, overshadows it.

Important as education is as a governmental function, it would be a mistake to consider it to be separate and entirely different from other governmental functions. It is natural for those engaged in furthering education, or health, or the adjudication of disputes, or the conservation of natural resources, or many other functions of government to consider that the function in which they are engaged has unique characteristics, with unique importance and unique values. True enough, every governmental function has certain unique features, but education and other governmental functions are closely intertwined.

The chief activity of a peacetime army, for example, is training (or education). The problems and techniques and even much of the subject matter resemble very closely and are closely related to those of the public school system. Public health is as much education as treatment. Social work and public welfare programs are closely associated with education in many aspects. It is hard to distinguish between public recreation and many phases of a modern educational program. The problems and functions of government are a seamless web; while education constitutes a large part of the web, it is linked in a thousand ways with the other portions of the fabric.

Levels. Governmental power is also divided into levels, or layers. In this country, as in most but not all others, there are basically three levels—here called national, state, and local. At the national and state levels, the governing units are distinct and clearly recognizable; at the local level in this country there is a tremendous jumble of units.

The superficial position, and the posi-

tion taken by many observers, is that particular functions of government are or should be assigned more or less exclusively to a particular level. Actually, some aspects of nearly all important functions of government are conducted at all three levels.

In the field of education, state and local governments are ordinarily vitally involved; the federal government has been less active than in many other functions, but there are a great many federal programs in the field of education.

For nearly a century there has been a tendency for the involvement of the higher levels of government in any particular function to increase at a more rapid rate than the lower. During the last fifteen years, this tendency has been stopped or reversed with regard to federal participation in all functions save that of defense. Meanwhile, the degree of activity at the state level has increased more rapidly than at the federal or local levels. Education is a good example of both the long term and the more recent tendency. At the local level of government, more responsibility for education has been vested in the larger units; state governments have increased their concern for the government and support of education more rapidly than have local units; federal activity, while still very limited, has continually increased, although perhaps not so much proportionately as that of the states.

This trend toward centralization does not mean that local involvement is decreasing, except in a comparative sense. Local government concern and participation in all functions, including that of education, ordinarily continue to increase, even though not so fast as state concern.

Increased activity at the state level and the national level, in education as well as

in other functions, has resulted in considerable measure from two factors. First, the higher level units have had much better access to resources (largely financial but not entirely so); they can collect taxes more efficiently and equitably, and can minimize the restricting competitive effects of differing tax rates among the lower level units. Second, higher levels have been able to equalize in some measure the service performed by the units at the lower level; the difference in quality of school systems between wealthy communities and poor communities has been greatly diminished by state activity.

Agencies. A third type of division of governmental work is by agencies. Particular jobs are assigned to special organizational units. Within any governmental unit, functions are assigned to a great variety of agencies. There are ordinarily separate agencies for education—sometimes a considerable variety of them, such as university boards, trade and vocational training agencies, eleemosynary institutions for handicapped children, and school districts and agencies of varying sizes.

Various problems are involved in the bases and methods of setting up government agencies. Perhaps the most pervasive of these problems, and one on which some educational administrators and some students of political science do not agree, is the appropriate degree of autonomy or integration for each agency.

Many educational administrators, while agreeing to various arguments for integration *within* education, maintain that education is so unique a function that it should be organized in completely autonomous agencies or even separate units of government. These pressures for autonomy exist with regard to most governmental functions, whether for education or for such functions as health,

welfare, highways, police or courts, and are based upon somewhat similar forces.

Most important of the pressures for organizational autonomy is a preference for professional rather than political determinants of policy. Philosophers of education and students of educational administration (as well as philosophers and practitioners in other specialist areas) are adherents to the doctrine of ultimate popular control, but many of them are strong advocates of organizational devices insulating the actual practice of their profession from very much control by generalist politicians.

Professionalization in education, as in other areas, has brought great advances. The development of better techniques and higher standards of practice, tremendously enhanced mobility and continuity of service among personnel, and a higher degree of prestige and group feeling constitute enormous gains. The drive for professionalism and for autonomy in agency organization produces some real problems, however. First, there are always problems of coordination among governmental functions. As was suggested earlier, education as a function of government greatly overlaps other functions. Voluntary cooperation and coordination in program areas are frequently insufficient. Organizational separateness also makes more difficult certain housekeeping efficiencies, such as the purchase and use of land and buildings and supplies. More important, if various governmental functions have independent access to the financial resources of the community or state, central consideration of the increasingly difficult problem of allocation of resources among competing needs becomes difficult if not impossible. Second, agency autonomy and separation provide a different kind of, and perhaps an inade-

quate, responsibility to the people. To have the people elect separate officers of government responsible for each particular function of government (schools, roads, law enforcement, tax collection, etc.) makes impossible any satisfactory attention and consideration by the voters. The real channels of responsibility which develop are to especially interested portions of the population. In the case of education, separate electoral responsibility has probably resulted in greatly enhancing the influence of limited portions of the middle and upper middle classes which have concerned themselves particularly with the function.

EDUCATION AND POLITICAL PROCESS

Pressures for organizational autonomy are frequently associated with substantial distrust of the central political processes. It is particularly appropriate, then, to proceed to the second focus of this discussion—the nature of the American political process as it relates to education.

In a broad sense, politics is concerned with power and influence, with the search for and the exercise of control and authority. It is also concerned with policy—with the ends and goals of the use of power and influence. It is concerned with making decisions about policy.

Thus broadly considered, politics is of course not confined to government. It exists within corporations, within churches, within all kinds of human groupings, including families. Political scientists have, however, concentrated most of their attention upon the politics of legally constituted governments—the forces and influences working in and upon them, and the nature and characteristics of the policy decisions made within their framework.

American governmental politics is characterized by a high degree of diversity working within a considerable framework of unity. Policy decisions by governmental agencies in this country are a product of a very complex tugging and hauling involving a great many forces. Pressure is brought to bear upon the point of decision from many sources and in many ways. Individuals and groups in a highly plural society exert their influence through many channels. While the vote cast at the ballot box is very important, it is probably greatly outweighed by votes cast in many other ways—through membership in groups, through letters or expressions of opinion to officeholders, through signatures on a petition or appearance as witness or even as audience at a public hearing, through membership on committees, through subscription to one journal instead of another, even through talk at a social gathering.

Political actions and decisions are a result not only of these tremendously varied overt influences and pressures but also of estimates and anticipations of possible reactions which may follow alternative courses of political action. They are influenced by the state of learning and the whole complex of culture. The role of education in producing a particular climate of understanding or opinion which influences policy decisions needs no elaboration.

Education, of course, is one of the great participants in this intricate process of politics. Organized groups of educators and of educational clientele exert their influences with varying degrees of success. The content of education to which young and old people are exposed influences their political views and expressions. Education as an activity of government takes form and shape as a

result of policy decisions, conscious and unconscious, which are the result of the great plurality of pressures and influences, overt or anticipated.

Not only is education a participant in the political process; there is a vast process of politics within education. There are divergent views and interests and groupings. There are laymen and professionals, administrators and classroom teachers, students and parents, higher education and elementary education and secondary education, city schools and rural schools, subject matter departments and groupings and special interests, along with the politics of personal mobility and advancement.

Policy decisions about education are made in the great political market place. Organizational arrangements, discussed in the preceding pages, are of importance largely because they give certain advantages of position to particular influences and forces, compared to other influences and forces.

A Russian satellite tossed into the sky has far-reaching political implications for educational programs. But these implications take shape and form only when considered in the context of many other circumstances and forces—attacks upon the educational curriculum by particular writers, the level of taxation, the role of teachers colleges and schools of education, the historical background of bills for federal aid to education, the position and role of local school boards, and which party is in power.

It may be that the very pluralism and complexity of forces in the American political process have been among the factors responsible for a considerable degree of basic unity. The American people seem fundamentally agreed on certain postulates—the primacy of the individual, an open society, certain civil

rights and freedoms, democracy as a governing doctrine.

While class and occupational differences are tremendously important in the American political process, the existence and the assumption of occupational and social mobility as a goal and to a considerable degree a reality have greatly reduced the tension and bitterness which such differences can sometimes engender. The multiplying differentiation into occupational and social groupings that has occurred in American society has made it impossible for any single group to hope to gain a preponderance of political power, or for other groups seriously to fear such an eventuality. This means that radical political changes are unlikely, and keeps the stakes of domestic politics, while important, from being matters of survival or destruction. The political parties find that chances of success are greater when appeals are made to the central tendencies of political views. The knowledge that sudden and drastic changes are unlikely if not impossible produces, in many respects, a higher degree of political apathy in this country than in most others. We are secure enough about basic political situations that we are slow to rouse.

This basic unity—a unity compounded of diversity—is evident with regard to public education. While limited groups of the population may have been given special influence over education by organizational arrangements, all groups know that they have political access and a degree of influence. Changes in educational policy come slowly, by the accretion of political forces from many places. The general public frequently appears to be indifferent to disputes about education, and educational issues, while sometimes sharp, are seldom considered bitter and crucial.

In these political processes all government agencies and most governmental individuals and citizens are engaged. Policy decisions are made in a market place involving a multitude of transactions of influence, of views, and of interests.

It is a common catch phrase that education should be kept out of politics. Another slogan, descended from our governmental theory of the separation of powers, is that educational policy is determined by the citizens and the school board, while school administrators and teachers merely carry out policy. Neither of these traditional views jibes with the description of the American political process suggested above.

The political process—the process of making policy decisions on the basis of forces and pressures felt and anticipated—occurs with regard to and within education just as in other governmental functions. These decisions are made not only by school boards but by school superintendents, principals, committees and groups of teachers, and by each teacher within his classroom. All of these participants in the policy-making process are engaged in politics, are politicians.

Who decides whether a school is "progressive" or "traditional"? The electorate, the school board, the state superintendent of education, the local newspaper, the chamber of commerce, the parent-teacher association, the principal, the professor at the state teachers college, the teachers in cloak room conversations, the teacher who reads an article in *Time* magazine and is influenced by it, the children who accept one approach and resist another. All of these and many more participate in the policy decision. All of these are a part of the political process in and around education.

To take education out of politics, therefore, is impossible. Choices can be

made as to which types and kinds of political influences will be given preference, which will be handicapped, but politics in a governmental program of the magnitude of education is inevitable. Educators tend to prefer, of course, professional politics to what might be called democratic politics. Any group which has, or thinks it has, a special lore and a special competence tends to feel that it should give the public what it ought to want rather than what it really wants (and what it "really" wants is not easy to determine). This is rationalized as staying out of politics. But, while this can be said, it can never be accomplished. All that can be done is to exercise some slight choice between kinds of politics.

CONCLUSION

In summary, education is one of the major functions and preoccupations of government, by most measures the largest next to the national defense. It has been traditionally conducted at the local and state levels of government, but state activity has been increased much more rapidly than local, and there have been significant federal programs for some time. As a function of government it is closely intertwined with a great many

other functions and cannot clearly be separated from them. Education, like other governmental functions, is conducted by a variety of agencies. To varying degrees, these agencies are autonomous and separate from other governmental agencies. The forces of specialization and professional development tend toward separation; the separation of the various functions of government, including education, into autonomous agencies creates substantial problems in regard to coordination and central political responsibility.

American politics is concerned with the forces and influences which affect and determine policy. Educational policy, like other public policy, is determined in and by a political system characterized by a high degree of complexity and diversity yet resting on general agreements with regard to fundamentals. School administrators and teachers cannot be kept out of the political process. Consciously or unconsciously they are participants in the great social processes of decision-making.

Education is a vital part of government, and educators are vital participants in the political process.

Teachers College, Columbia University Register of Doctoral Dissertations

ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Volume IV, Third Annual Supplement

July 1, 1956—June 30, 1957

This *Register* does not include project reports submitted in partial fulfillment of requirements for the Doctor of Education degree.

It should be noted that titles of dissertations not yet published are sometimes changed at time of publication.

111. MILLER, MAURICE HERBERT
Clinical application of paired masking enclosures in pure tone air and bone conduction testing of subjects having a differential in the hearing acuity of the two ears of thirty decibels or more. Microfilm, 1956.
112. EASTMAN, DANIEL
Self acceptance and marital happiness. Microfilm, 1956.
113. KENT, HOWARD ROBERT
The effect of repeated praise or blame on the work achievement of blind children. Microfilm, 1956.
114. GOULD, IRWIN BERNARD
Drug addiction and delinquency; an experimental study in persistence under changing conditions of reinforcement. Being microfilmed.
115. WOLF, ALVIN
Stability of test performance of schizophrenic patients. Being microfilmed.
116. LORAND, RHODA LEIGH
Family drawings and adjustment. Being microfilmed.
117. ADELSON, DANIEL
Attitudes toward first names; an investigation of the relation between self-acceptance, self-identity and group and individual attitudes toward first names. Being microfilmed.
118. REYNOLDS, WYNN ROBERT
Persuasive speaking of the Iroquois Indians at Treaty Councils, 1678-1776; a study of techniques as evidenced in the official transcripts of the interpreter's translations. Being microfilmed.
119. BURNHAM, MARGUERITE VICTORIA PETERSON
Imaginative behavior of young children as revealed in their language. Microfilm, 1956.
120. TOMBLIN, DONALD TRACY
Anxiety and conceptual impairment in schizophrenia. Being microfilmed.
121. WISE, FRED NATHAN
Effects of chronic and stress-induced anxiety on Rorschach determinants. Microfilm, 1957.
122. CALOGERAS, ROY CUNO
Some relationships between fantasy and

- self-report behavior. Being micro-filmed.
123. HALPERN, SEYMOUR
The significance of critical flicker-fusion thresholds in cerebral palsied children. Being microfilmed.
 124. RUSTEBAKKE, ALBERT RONALD
Achievement motivation before and after frustration and its relation to manifest anxiety in schizophrenic patients. Microfilm, 1957.
 125. ARONSON, LEONARD
Self-distortion and distortion of others. Being microfilmed.
 126. OBERLEDER, MURIEL B. FELDMAN
Attitudes related to adjustment in a home for the aged. Being microfilmed.
 127. VINTER, ROBERT DEWHIRST
Social goals and social participation among urban lower class white males. Being microfilmed.
 128. BARKER, ELIZABETH FRANCES DUNNING
The perception of sexual symbolism. Being microfilmed.
 129. GAVURIN, LESTER LIPMAN
Teachers of mathematics in liberal arts colleges of the United States, 1888-1941. Being microfilmed.
 130. ZLOT, WILLIAM LEONARD
The role of the axiom of choice in the development of the abstract theory of sets. Microfilm, 1957.
 131. ERNEY, RICHARD ALTON
The public life of Henry Dearborn. Being microfilmed.
 132. IZZO, JOSEPH ANTHONY
A history of the use of certain types of graphical representation in mathematics education in the secondary schools of the United States. Microfilm, 1957.
 133. NORRIS, RAYMOND CALVIN
Development of a set of dimensions for description of air force ground crew jobs. Being microfilmed.
 134. BOLES, GLEN
Personality factors in mothers of cerebral palsied children. Microfilm, [1957]
 135. JAEGER, MARTHA HOLLOWAY
Some aspects of relationship between motor coordination and personality in a group of college women. Being microfilmed.
 136. WEINBERG, GEORGE HENRY
Clinical versus statistical prediction with a method of evaluating a clinical tool. Being microfilmed.
 137. SUGARMAN, DANIEL ARTHUR
The relationship of success and failure to the recognition and evaluation of self-products by normal and schizophrenic subjects. Microfilm, 1957.
 138. DIERS, HELEN ANNA
Factors in the understanding of others. Being microfilmed.
 139. SHELSKY, IRVING
The effect of disability on self-concept. Microfilm, 1957.
 140. YOGANARASIMHIAH, MALAVALLI
Some factors related to work attitudes in ninth grade boys. Being microfilmed.
 141. CRITES, JOHN ORR
Ability and adjustment as determinants of vocational interest patterning in late adolescence. Being microfilmed.
 142. STARK, PAUL JOSEPH
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 143. GREGG, ROBERT LEROY
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 144. WANGER, JACK CHARLES
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 145. BROPHY, ALFRED LAURENCE
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146. SOLE, DAVID
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152. GREEN, LEAH ANN
A study of creativity and the self-attitudes and sociability of high school students. Being microfilmed.
153. STEPHENSON, GEORGE ROTHWELL
Form perception, abstract thinking and intelligence test validity in cerebral palsy. Being microfilmed.
154. CURRY, WILLIAM LEE
Comstockery: a study in the rise and decline of a watchdog censorship; with attention particularly to the reports of the New York Society for the Suppression of Vice, to magazine articles and to news items and editorials in the *New York Times*, supplementing other standard studies on Comstock and censorship. Being microfilmed.
155. COSTA, LOUIS DAVID
Test anxiety, self-acceptance, and task performance in an induced failure situation. Being microfilmed.
156. GRIMALDI, ALFONSINA MARY ALBINI
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REVIEWS

Higher Education in a Decade of Decision. Educational Policies Commission, NEA and AASA. Washington, National Education Association, 1957. xii + 152 pp. \$2.00, cloth bound; \$1.50, paper bound.

Thirteen years ago the Educational Policies Commission presented its ideas regarding American secondary education. Its report, *Education for ALL American Youth*, was imaginative, hard-hitting, and controversial. It made a stir, and has left a mark.

Now the Commission has turned its attention to higher education. Its report on this subject is entirely different in character. Generally speaking, it is commonplace, cautious, and dull. As a brief, systematic survey of the American college and university scene it is reliable, and may prove useful to certain audiences. Its middle-of-the-road recommendations are worth further consideration. But the report blazes no new trails and is unlikely to produce any excitement.

The Commission notes and praises the variety that marks higher education in the United States. It stresses the prospective expansion of enrollments and the equally highly publicized importance of attracting a larger proportion of our most talented youth. Expanded scholarship programs, making use of tests of academic merit and financial need, are favored. The desirability of better articulation between high school and college is noted. A slightly novel touch is the recommendation that one- and three-year, as well as two- and four-year, post-secondary programs be developed; but the defense of this view is very general.

As regards the evident need for rapid expansion of college and university facilities, the Commission urges state-wide and regional planning and declares itself in favor

of the expansion and more efficient utilization of existing plants rather than much in the way of setting up new institutions. The issues relating to institutional size are not, however, really explored.

Brief and relatively familiar proposals are made for the improvement of both general and special education, and their more effective integration is favored. The educational value of extracurricular activities is stressed, and so is the desirability of dovetailing them with the curriculum. More responsibility for their own educational development should, of course, be placed on the students, and "newer methods of instruction" should be experimented with.

The importance of the research function of higher education is naturally not overlooked. And there are the usual recommendations that basic, as contrasted with applied, research should be emphasized, and that distortion consequent upon overconcentration in single fields (read "science") should be avoided.

There is a good word for academic freedom, and a special emphasis on the critical importance of faculties. "Recruitment and maintenance of outstanding faculties is the most urgent . . . problem of higher education in current years." "Faculty salaries, now lamentably low, should be given the highest priority in expenditures. . . ." Bravo!

Finally, after estimating prospective financial needs for higher education and taking a look at trends in the gross national product, the Commission concludes that the money can be found. The usual sources—individuals, corporations, and states—are looked at, and all are urged to exert themselves. The question of federal aid is handled in a rather gingerly fashion. "The trend of American life is toward increased federal responsibility and, unless states and

private donors are willing to increase very greatly their expenditures for higher education, it seems likely that increased federal support will be necessary to meet the expansion emergency of coming years."

One may sum up by saying that *Higher Education in a Decade of Decision* touches on all the major elements in the situation it explores, but at no point digs deeply. The style is clear but pedestrian. The book can help the interested but hitherto uninformed reader to get a sound general picture of the current higher educational scene. But it may be doubted that it will leave him with a sense of urgent personal responsibility to make up his own mind and to act in accordance with what he decides.

KARL W. BIGELOW
Teachers College, Columbia

Cubberley of Stanford and His Contribution to American Education, by Jesse B. Sears and Adin D. Henderson. Stanford University Press, 1957. vii + 301 pp. \$5.75.

As time moves on and the decades pass by, it becomes more and more regrettable that the work of the notable leaders in the early years of this century who contributed so much to the development and advancement of the study of education may be forgotten. This becomes still more unfortunate as those who learned from them and worked with them pass from the stage. As an academic discipline, education in its manifold facets is hardly more than fifty years old. Apart from subjects known as pedagogy and school management there was in fact little material available at the beginning of the century to constitute a program of university study. When Dean James E. Russell discussed the possibility of a course in the administration of education with one of the prospective candidates for appointment, the latter stated that he did not think he would have enough material for more than two lectures. And even Paul Monroe is reported

to have told the Dean that he did not believe that there was enough content for a course in the history of education. In another area, Edward L. Thorndike had to transfer the knowledge that he had acquired in the study of animal psychology and statistical methods to the field of educational psychology.

After 1877, a few chairs were established in education, but it was not until the end of the nineteenth century, under the influence of Nicholas Murray Butler and James E. Russell, followed a few years later by Ellwood P. Cubberley, that a vision of the scope and function of university departments of education began to be caught. In 1900 Dean Russell stated that "university departments of education have as their special function the investigation of educational foundations, the interpretation of educational ideals, the invention of educational methods, and the application of educational principles. The science of education needs to be developed and made over to fit modern conditions." Two years earlier, in a letter to Edward Howard Griggs, who had inquired whether he would accept an appointment in the Education Department of Stanford University, Cubberley wrote: "I feel that I have much ability along the lines of school administration, school problems, school organization, school statistics, secondary schools, history of education, relation of ignorance and crime to education, etc., and that in these and similar lines I could work up fine courses, making them better each year. I have a dozen courses in mind that I could work up, courses that would not be so much a summation of present knowledge as courses of suggestion for future action." Before Cubberley joined the Department, Griggs had left; and Cubberley had a free hand to develop "high grade university work . . . toward the attainment of ideals in the future rather than of small practical results in the immediate present."

Thus arose in the East, Teachers College, Columbia University, under James E. Russell and in the West, the Department of Education of Stanford University under Ell-

wood P. Cubberley. There was, however, this difference: while Dean Russell selected men of ripe scholarship in their various fields of specialization, Cubberley made himself responsible for the development of the study of the history of education and of school administration and supervision, and associated with himself Lewis M. Terman and later Truman Lee Kelley to develop the fields of educational psychology and intelligence testing and measurement.

Cubberley must have owed a great deal to his years as a student at Teachers College, which was at that time a fertile field for the development of materials for the study of educational history and aspects of school administration, a development in which both faculty and students cooperated. Among his colleagues in this work of pioneering were Edward C. Elliott, Bruce A. Payne, Fletcher H. Swift, George D. Strayer, Henry Suzallo, and many others who were to labor in the same vineyard.

Cubberley of Stanford is more than a biography written by a colleague and a student; it is a history of the development of the two subjects with which Cubberley's name will always be associated—the history of education and school administration, both of which he cultivated because of his devout faith in American education and a desire to raise the cultural level of education as a discipline. Because of his extensive influence throughout the country, the subtitle of the book should have been given more emphasis even than the main title.

The book is an enlargement of a dissertation by Henderson and suffers a great deal from repetitiveness. Some of the early chapters could have been compressed into one short one; the chapter on Cubberley's financial acumen, which made possible the many grants to the University, seems irrelevant. But more serious is the effort to link Cubberley's approach to education with his early study of geology and his association with David Starr Jordan. Cubberley's strength lay in the breadth of his approach to education, which came from his devotion to the history of education and

education as public policy, both of which transcend what later came to be called the scientific approach to the subject.

Despite these criticisms, students of education are under a debt to the authors of *Cubberley of Stanford*. It is to be hoped that this work may be followed by others on the pioneers of the study of education as a university discipline.

I. L. KANDEL
Ankara, Turkey

NEA: The First Hundred Years, by Edgar B. Wesley. New York, Harper and Brothers, 1957. x + 419 pp. \$5.00.

In August 1857 a group of forty-three "practical teachers" were assembled in Philadelphia to form a National Teachers Association for the express purposes of elevating the character and advancing the interests of the profession of teaching, and promoting the cause of popular education in the United States. This is the centennial year of the National Education Association; its objectives today are identical with those of one hundred years ago. However, it has come a long way since 1857. By way of celebrating its one-hundredth birthday the NEA asked Edgar Wesley, a skilled historian, to tell the story of the organization and its activities. This volume is the response to that request.

Professor Wesley has given us not so much a straight history of the organization as an outline of certain aspects of American education in which the NEA has played an important role. Considering the scope of its activities during the past century, one is indeed treated to a vast panorama of educational progress in our country, as well as a close glimpse at how the NEA has evolved to what it is today—a mammoth organization claiming a membership of approximately 700,000 with 66 state associations and 6,000 local associations affiliated with it.

The organization of the book is worth noting. The author does not adhere to a strictly chronological sequence, but skips

back and forth in time as he deals with various phases of the Association's history. The work is divided into five parts, each one touching upon a different aspect of the Association's activities. The footnotes consist almost entirely of references to *NEA Proceedings*, the official minutes of the organization. This is unfortunate in a way, since the story might have proved even more interesting had Professor Wesley consulted additional sources of information, thereby achieving added breadth to his discussion. Part I is devoted to the first few years of the organization's existence. This probably holds most interest for the serious student of educational history.

Part II, entitled "Development of American Education," includes chapters on the rise of the high school, normal schools, and teachers colleges in the United States, the advance of higher education, and the changing curriculum. The author does not claim that the NEA has been solely responsible for everything good in education. Most attention, however, is given to the contribution of the NEA and how, through its policies, committees and departments, it has served to advance these important developments in American education. Part II also contains an interesting chapter on "Hails and Wails," in which the author shows graphically that criticism of the schools is not limited to our day and age. Witness, says Professor Wesley, this pronouncement, written in 1864: "The readers and speakers admitted into the grammar school within the past two years, or since this reading furor has existed, are not equal to those of former years."

The yearly NEA meetings have served as the battlefields for some of our most important educational reforms. Such subjects as object teaching, the kindergarten, child-centered education, coeducation, the Herbartian Movement, and the Progressive Movement are treated in Part III under the heading "Educational Reforms." The author makes the point that through its conventions and publications, the NEA and its departments played a large role in these

movements, acting as a synthesizer rather than as a creator of educational change. One is impressed with the general objectivity of the presentation. Too often in treatises of this sort authors are prone to exaggerate the influence of the agency or association they are studying.

Occasionally, however, this author reveals what appears to be a trace of bias. In Part IV, "Lost Causes," in the chapter entitled "Teachers and Temperance" we find this statement: "The official position of the association (on temperance) was made clear, however, by resolutions and statements of principle. In 1918 it urged teachers to approve the prohibition amendment, and in 1920 and 1930 it endorsed the 18th amendment and called for the impartial, fearless enforcement of the Volstead Act." On the very next page of this volume he writes: "So it seems that the relative neglect of prohibition and all its problems by the NEA is simply an instance of clear-eyed perception between public action and public education." This inconsistency however is the exception rather than the rule and the author has supported most of his generalizations with ample evidence.

In Part V of the book, "The NEA Builds a Profession," the author delves into the inner workings of the organization. It is interesting to note that it was not until 1920 and the establishment of the Representative Assembly and the ubiquitous *NEA Journal*, that the organization could be deemed truly representative in terms of membership. In that year the enrollment jumped from a little over 10,000 members to nearly 53,000. This certainly makes a strong case for the democratization of educational organizations.

One wonders how defensible the author's conclusion is regarding teaching having attained the status of a profession. The last sentence in the chapter "Advances Toward a Profession" reads as follows: "In fact, education has become a profession." While this enthusiasm is understandable, many educators are of the belief that certain harsh facts controvert such an assertion. That we are

rapidly moving in this direction is certain, and there can be no doubt that the efforts of the NEA have contributed greatly to the advancement of standards. Moreover, the day is surely not far off when the profession of teaching will truly deserve the name. However, as the NEA itself has often pointed out, in terms of academic preparation and professional outlook, we still fall short of the levels reached by such recognized professions as law and medicine.

The last two chapters deal with the work and the contributions of the 30 departments of the NEA covering nearly every aspect of the educational enterprise, and the outstanding contributions of the Research Division and the Educational Policies Commission. The stories of these various branches furnish real insight into the history of educational progress in our country.

Professor Wesley's volume is well worth reading. Despite certain minor flaws, it affords a solid documentation of many of our more important educational advances, as well as an absorbing analysis of our most effective and representative education association.

WILLARD S. ELSBREE

JACK H. KLEINMANN

Teachers College, Columbia

Half the World's Children: A Diary of UNICEF at Work in Asia, by Spurgeon M. Keeny. New York, Association Press, 1957. xxvi + 243 pp. \$3.50.

Of the various agencies associated with the United Nations there are few that have caught the imagination and the support of the people throughout the world as much as the United Nations International Children's Emergency Fund. In the United States children in many communities forego the usual harassing of neighbors on Halloween to collect money for UNICEF. The medium of television, using the genius of Danny Kaye, has helped to explain what UNICEF is and what it is undertaking throughout the world. There are official re-

ports with statistical charts pointing out, for example, the success of campaigns to eradicate yaws and there are brochures published by the agency that give brief accounts of specific projects.

Half the World's Children tells the story of the first seven years of UNICEF and its attempt to establish food and medical programs in Asia. The author is Asia Regional Director of UNICEF. As 40 per cent of all UNICEF work is concentrated in this area, the account given by Mr. Keeny is a good representation of the work carried on by this agency.

The book is written in a popular style and is meant for the public rather than the specialist. As UNICEF is concerned with those areas where the mortality rate of children is the highest in the world, this could have been a book of tragedy. There is of course tragedy in it, but there is also humor as well as the optimism that seems to be typical of those who are working under what appear to be impossible odds.

Interspersing the reports are observations on the cultural life of the people and humorous accounts of the difficulties faced by the Director while visiting projects that range from the Philippines to Afghanistan. This diary style is such that it would be easy to miss some keen observations made and conclusions reached by Mr. Keeny. For example, his statement on the type of person who works well in these projects might suitably be followed by the International Cooperation Administration of the United States and other United Nations agencies. Perhaps if the book had been organized in areas rather than chronologically it would have been more effective.

In any case the effectiveness of UNICEF from its start in Asia in 1950 to the establishment of 125 projects in 1957 is a tribute to a staff working on a limited budget and faced with the tremendous problems of cultural transformation. The book emphasizes one aspect of UNICEF that is so often overlooked in general accounts—the fact that UNICEF is not simply a relief agency but rather is concerned with building projects

that will be permanent. It will always have as one of its functions meeting emergencies such as assisting with mass inoculations against cholera and typhoid in flooded areas, but beyond this it is active in helping to build permanent projects that will serve to reduce emergencies. Typical in this regard is the work being carried on so effectively for the eradication of yaws, or the establishment of a soya milk plant in Indonesia and mother-and-child centers in Bihar. The "Emergency" in UNICEF is thought of in terms of both immediate and long-range planning.

Half the World's Children will be read by many people who are already committed to the philosophy of UNICEF. It should be read by those who ask what can be done when the problems are of such magnitude. Here is a balance sheet which shows the results achieved with limited funds. How many lives could be saved, how much suffering could be spared if additional funds were available!

DAVID G. SCANLON

Newark (N. J.) State Teachers College

Fiscal Readiness for the Stress of Change,
by Paul R. Mort. University of Pitts-
burgh Press, 1957. 97 pp. \$1.00.

It is far more than fiscal readiness for the stress of change that the author pleads for in the 1957 Horace Mann Lecture, fifth in an annual series sponsored by the University of Pittsburgh. It is for readiness itself.

Long an able, articulate, and discerning critic of forces that impede educational progress, Dr. Mort, in a penetrating presentation has developed a synthesis of views and convictions with which for many years he has been familiarly identified. The result is a distinguished and significant contribution worthy of wide reading and discussion.

Well known for his impatience with educational lag, Dr. Mort wastes no time in laying bare his conviction that "our schools fall far short of our needs." This deficiency

is due in large measure, he holds, to what he refers to as "the foundation of the schools" which, in turn, he describes as the inadequacy of the basic law by which schools are operated and governed.

Critical of the "legal under-pinnings of public education," Dr. Mort argues that lay and professional leadership seeking to rectify deficiencies must overcome three serious shortcomings "(1) artificially induced poverty, (2) lack of access to adequate resources, and (3) lack of responsive political machinery through which the community's concerns may be realized." To each of these three areas of concern the lecture addresses itself and concludes with the listing of six factors essential to the accomplishment of what is referred to as "a task of modernization of huge proportions."

This description of what must be done takes on the characterization of which Dr. Mort is seldom guilty—understatement. In the bill of particulars the state legislature "or some other responsible body" (which is unidentified) is called upon to "overcome the destructive effects on education of poverty induced by the decision to operate as school districts," "to keep the tax system in such adjustment that local autonomy shall not be throttled merely for lack of access to the resources the community has," and "to establish fiscal control machinery that will give each community an important measure of control over its educational destinies." On the state department of education is placed the responsibility of keeping "a continuing chart of the locus of effective control over education and [of hauling] to court any educational officer or officer of any other aspect of government, local, state, or federal, that through administration warps a law so as to enhance central power to a degree not explicitly spelled out in the law." Where interpretation of the law becomes necessary, Dr. Mort would have the courts "decide in favor of the more local level of government." Finally "on petition of citizens alleging undue delay in action on educational concerns by the constituted authorities, pro-

vision shall be made for a popular vote at the next general election on the issues enumerated in the petition."

This action program Dr. Mort identifies "in the public domain." He calls upon "volunteers" to undertake it, holding that "the call to leadership is to grasp the great strategic problems that have come to be the people's problems." In a manner entirely characteristic and underscoring a contention long held, Dr. Mort concludes: "Our school system has made a poor response to the stresses of change. Inertia has been mistaken for stability. Minor responsiveness has been mistaken for stability."

Had this Horace Mann lecture been delivered later in 1957, it is quite probable that in light of world-shaking events of the autumn Dr. Mort would have spoken out even more boldly than he has. Brief reference, too, to the problems confronting education today involving sorely needed curriculum change, a vitalization of the entire educational process on all levels, not to mention more teachers, more buildings, and more facilities necessary to educate more girls and boys, would have served to underpin the presentation with added conviction and documentation.

As Dr. Mort has so frequently expounded, the most valid tradition of American life is the tradition of change. Today when we consider change we think of it in its total climate and environment, representing, as it does, all of the conditions of life. With science's postulate "adjust or perish" Dr. Mort is familiar. No less a responsibility confronts American education today. Not only to make change possible but to have it serve the needs of a society we hope to perpetuate and improve, our total educational program must contribute. It is to the heart of this process that Dr. Mort addresses himself, ably and convincingly. All who know and recognize his capabilities hope that on some occasion equal to that on which this distinguished contribution was made he will pursue the thesis of change further and encompass more of its anatomy. With his diagnosis and prescribed treatment no thoughtful student of the current educational scene can disagree. The findings of a skilled diagnostician warrant consideration, acceptance, and action.

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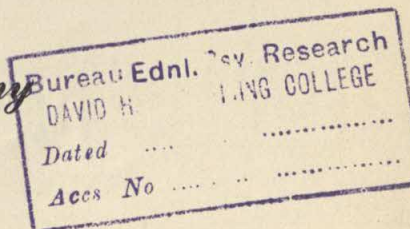
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TEACHERS COLLEGE RECORD

Education and the Technological Revolution*

GEORGE S. COUNTS

PROFESSOR EMERITUS OF EDUCATION, TEACHERS COLLEGE

APPROXIMATELY a generation ago one of our greatest Supreme Court Justices, Oliver Wendell Holmes, observed that "what we need today is less inquiry into the abstruse and more thought about the obvious." While I would have no objection to more inquiry into the abstruse, I believe that Holmes was profoundly right. And, as in my other lectures, I am going to elaborate the obvious.

The peoples of the world in the present epoch are leaving behind the material forms and agencies of a civilization which in its broad outlines endured for many centuries. This civilization was based on agriculture, animal breeding, handicraft, simple trade, and human energy—a civilization that in its many variants dates practically from the beginning of recorded history. The civiliza-

tion which our fathers and mothers brought to the New World in the sixteenth and seventeenth centuries and molded into special patterns during the succeeding two or three hundred years was one of those variants.

A new civilization is rising in the West and spreading swiftly throughout the world—a civilization that is coming to be called industrial—a civilization so strange in its forms, so vast in its reaches, so complex in its patterns, and so mighty in its energies that thoughtful men and women fear that the control of its operations may prove to be beyond the powers of its creator. The fact must be emphasized, moreover, that in spite of the common reference to the "industrial revolution" as a limited series of changes in modes of production which took place in England in the eighteenth century and in other countries at later times, the revolution has actually been gathering momen-

*This is the second in the series of lectures on "Education for a Society of Free Men in the Technological Era" delivered by Dr. Counts in Brazil in 1957.

tum with every decade. Industrial *civilization* is probably still in its early infancy. What it will be like when fully matured we do not and cannot know. That it will assume, at least for a time, different forms in different societies, among peoples of diverse cultures, may be confidently expected. Moreover, although certain of its broad imperatives and potentialities are already clearly discernible, we may be sure that it will bring many surprises, challenges, hazards, and opportunities to mankind.

The basic source of this new civilization is science. We must all concur in the judgment of Preserved Smith in his *A History of Modern Culture*. "Of all the elements of modern culture," he writes, "as of all the forces moulding modern life, science has been the greatest. It can be shown that all other changes in society are largely dependent on this. Thought, philosophy, religion, art, education, laws, morals, economic institutions, are to a great extent dependent upon the progress of science. Not only does science alter techniques in the production of wealth, but it alters man's view of the world in which he lives. The world-view is perhaps the decisive factor in moulding life and civilization." Undoubtedly the rise of science distinguishes our age from all the preceding ages of human history. And technology is the application of the methods and findings of science to the ways of life.

The penetration of science and technology into our culture involves education in two major tasks—the one relatively simple and the other profoundly complex. The first is the mastery and advance of scientific and technical knowledge, the training of engineers and scientists. Although at the moment this task arouses considerable excitement in my country because of the astonishing suc-

cesses of the Soviet Union in this realm, it should not be our major concern. The real problem lies in the social, political, and moral sphere—in the sphere of values and understandings. We must strive in all haste to rear a generation capable of living with and directing toward humane ends all the resources of science and technology. The emphasis here will be placed on technology.

This question takes us again into an inquiry regarding the nature of culture. We must realize that a new cultural element changes the character of both the culture and the people involved. The introduction of such a powerful element as technology is therefore a most serious matter. It does not mean merely an addition to elements already present. A culture is much more than an aggregation of distinguishable elements. It is much more than the sum of its parts. It is essentially a system of functional relationships in which the diverse elements react upon one another and are bound together into a kind of organic unity. Consequently, a new element will affect eventually, according to its strength, the entire system of relationships. And this means that it will change the very character of the people nurtured by the given culture or civilization. A Connecticut clergyman, Horace Bushnell, saw this clearly in the middle of the last century. "This transition from mother and daughter power to water and steam power is a great one," he wrote, "greater by far than many have as yet begun to conceive—one that is to carry with it a complete revolution of domestic life and social manners."

Technology impresses its special character on a culture and on the bodies, minds, and hearts of those who use it. To think of technology solely in terms of its material products, of its discoveries and

inventions, would be a grave mistake. In essence it is a process, a way of working, a method of attacking problems, a mode of viewing the world. As such, it has a number of characteristics. First, it is marked by emphasis on precision and ever greater precision, on orderly and defined relationships. Second, it is experimental in method, guided by bold imagination and careful observation, irreverent of the past, of great names, of authority as such in every form. Third, it is practical, concerned with the useful rather than the academic, with the application of knowledge to the ways of life rather than with the cultivation of knowledge for its own sake. Fourth, it is playful, insisting on the utility of design, on the rational ordering and coordination of materials and energies in the light of purpose. Fifth, it is dynamic, ever challenging the old, ever seeking new knowledge and new and more efficient ways of doing things, ever striving to push forward the boundaries of understanding and control. Its symbol is the laboratory. Clearly, in taking such a powerful and aggressive element to its bosom, any civilization is asking for trouble and crisis, excitement and adventure without limit.

The interaction of a culture and a new element, of course, works both ways. Every culture always impresses its special character on technology. Just as fire or the wheel has been put to the most diverse uses by different peoples, so technology can be directed toward the most diverse ends. It may be employed to destroy everything that is good in the world and to fasten some form of despotism on all peoples. Also, we have reason to hope, it may usher in the most glorious age of human history. At bottom the issue here is moral in character. Technology has raised anew and on a

vaster scale than ever before the ancient question of the values by which men live.

The process of interaction between the old and the new of a culture may generate severe and even mortal strains in the society involved. Thus the swift transformation of the material foundations of life and the lag of institutional, ideological, and moral adjustment seem to be at the bottom of the terrifying crises, the wars and depressions, the revolutions and counterrevolutions of our time. Our world, in both its domestic and its international aspects, is out of joint. In 1937 the distinguished English archaeologist Stanley Casson published a book entitled *Progress and Catastrophe*. In this work the writer attempted, in the light of the entire human record, to answer the question as to whether the lot of man has been one of progress or of catastrophe. His answer, of course, was that man has experienced both. He concludes his review of the long human adventure with these words: "When his practical inventiveness ran ahead of his moral consciousness and social organization, then man has equally faced destruction. Perhaps today we are in this stage." The intervening two decades would seem to have strengthened rather than weakened his foreboding. Our "practical inventiveness" has been rushing ahead, while our "moral consciousness and social organization" have made little progress.

II

In the autumn of 1938, following the Munich Pact which was to "bring peace in our time," Anne O'Hare McCormick, one of our most distinguished commentators, observed in her column in *The New York Times* that "all of those things are happening in the world that could not happen." Mrs. McCormick, of course, knew that things don't happen that can't

happen. Obviously what she meant was that many things were happening which could not have happened if our basic premises and assumptions about the world had been sound. She was also saying that our minds were dwelling in a world that had passed away, that we live in an age marked by changes involving the very foundations of civilization and the relations of nations, that we live in a revolutionary epoch which embraces the whole of mankind.

In this sense we have seen many things happen that could not happen. The First World War was such an event. All sensible people knew before August, 1914, that the statesmen of Europe would never allow their differences to reach the point of an internecine struggle that would place in dire peril the whole of Western civilization. And after the war began they knew that it could last only a few months because the economies of the several nations involved could not long bear the tremendous costs of the struggle. We in the United States, though we had our sympathies, resolved at the outset that we would never become directly involved. Yet we were drawn inexorably into the struggle and sent our young men into battle beyond the oceans, contrary to our entire isolationist tradition which had been built up during three centuries in North America.

We entered the war under the slogan of a "war to make the world safe for democracy." After it was over we were convinced that such had been its purpose and that democracy had triumphed. Had not the great autocracies of central and eastern Europe collapsed—first the house of the Romanovs, next the house of the Hapsburgs, and finally, the strongest of the three, the house of the Hohenzollerns? The road to the future was clear, and there could be only one road

—the road to democracy and popular government. Anything else was unthinkable. Yet on the ruins of the ancient autocracies there arose new revolutionary systems which proved to be far more tyrannical than the old—the "popular despotisms" of Bolshevism and Fascism.

When the Bolsheviks, a tiny minority of revolutionaries, overthrew the promising Provisional Government in Russia by force and violence on November 7, 1917, we knew that they would survive only a few days or weeks because they were opposing the whole trend of the age—the trend toward popular rule. Moreover, in their proposal to abolish the institution of private property in land and the tools of production they were obviously violating the laws of nature revealed by the classical economists of the nineteenth century. Indeed, an American Secretary of State in the late twenties declared Russia an "economic vacuum." That the Soviet Union under the dictatorship of the Bolshevik Party would develop into the towering industrial colossus of today was quite beyond the bounds of common sense.

The rise of Hitler also, not to mention Mussolini, was contrary to all the rules of logic. When he first appeared, shouting his barbarous doctrines of Nordic superiority, he seemed to all right-thinking people a comic figure on the stage of history. With his little black moustache he reminded one of Charlie Chaplin. With his arrest and subsequent imprisonment, following his "beer hall putsch" in Munich in 1924, all agreed that he was finished. While in prison he wrote *Mein Kampf*, in which he outlined his objectives and methods with utter clarity. Yet no one took him seriously because the German people were the most literate great nation in Europe—a people, moreover, who had contributed mightily to

the development of European culture in the realms of art, music, literature, science, and philosophic thought. Yet he came to power and plunged the whole world into darkness.

The great economic depression which hit the United States and most of the rest of the world in 1929 likewise could not happen. The American economy had been moving from triumph to triumph, and every American family was to have a "chicken in every pot and a car in every garage." Yet, in spite of all the wise soothsayers, the depression came and lasted in some measure until the economy was rescued by the Second World War—by far the worst depression in the history of the Republic.

The Second World War, like the first, was also impossible. Again we resolved not to become involved. American soldiers, we were assured, would not be called upon to fight on foreign soil. Yet they died by tens of thousands in the most distant regions of the earth, on the land, in the air, and in the water, in the prison camps and on the death marches of Germany and Japan. Today we rightly fear the coming of a holocaust that would dwarf any previous death grapple of the nations.

The disaster at Pearl Harbor which precipitated the United States into the Second World War must also be listed. After the event several inquiries into the question of responsibility were launched. The fact is that the American people generally were responsible. We lived under the spell of an illusion which we shared with practically all European nations. If it had been Germany in the Pacific, or any other Western state, we would not have been caught unaware. But it was the Japanese, a colored people, and therefore not to be taken too seriously. The following story went the

rounds in those days: An American naval commander was asked what would happen if the Japanese fleet were to attack San Francisco early some morning before breakfast. The answer he made was that the American forces would get up, go out and sink the hostile vessels, and return in time for breakfast. Asked for an explanation of this happy disposal of the matter, he replied that the Japanese were mere imitators and incapable of creative and original thought. Their ships were badly constructed, their armaments were inferior, and their gunnery was bad.

The creation of the atomic bomb was another impossibility. Although this fateful advance in the destructiveness of weapons of warfare had been foreshadowed by the work of the physical scientists since the opening of the century, the suggestion that matter would be converted into energy made little sense to the ordinary citizen. And as the scientists who had fashioned the first atomic bomb awaited the outcome of the test on the deserts of New Mexico in July, 1945, they were by no means certain that the contraption would actually explode. But it did, and in so doing opened a new epoch in the history of the race.

The list could be greatly extended, but time does not permit. It must suffice to say that the end is not in sight. During the next half century we shall doubtless see many more things that could not happen. As a distinguished student of the history of engineering and technology, R. J. Forbes of the University of Amsterdam, has recently written: "The heralding of the Atomic Age has rudely awakened us to the fact that, to paraphrase the words in which Newton summarized his life's achievements, we have picked up but a few pebbles on the shores of a great ocean that still remains to be explored." Perhaps the most revolu-

tionary discoveries and inventions lie in the future, provided mankind has a future. To prepare a generation to expect and to live with the impossible should be one of the major objectives of a liberal education.

III

Already, as we have noted, the world has been profoundly transformed by the impact of science and technology on the heritage bequeathed to us by the nineteenth century. Out of this impact have emerged seven stark realities which are largely responsible for things happening that could not happen. These realities must be brought into our basic premises about the world if we are to deal rationally with problems and crises of the coming years. Indeed, any one of these realities would be sufficient by itself to mark the coming of a new age.

In the first place, the whole earth has been reduced to the dimensions of a little neighborhood. As a result of this development we may say that a major cycle in the life of man is closing in our time—a cycle which embraces hundreds of thousands, possibly a million years. It opened in that long-forgotten age, aeons before the dawn of recorded history, when man moved out from his place of origin, from some Garden of Eden, to occupy and sustain himself in practically all parts of the earth. In the process of migration, settlement, and adaptation, combined with the operation of factors of geographical barriers, great distances, and isolation, the several races and varieties of the human species, the many languages, religions, cultures, and political systems were formed.

For some time now, probably since the voyages of Columbus and Vasco da Gama, and particularly during the present epoch, this ancient tendency toward

separation and differentiation has been reversed. In terms of means of communication and life conditions that bind men together into communities and societies, the whole earth is no larger than that tiny Garden in which man first ate of the fruit of the tree of knowledge of good and evil, and thus became man. And the divers members of the human family, with their long heritage of rivalry and conflict, of prejudice and hatred, are being pressed together in this tiny garden. As a consequence, the lot of each, including ourselves, is being joined in ever-growing measure with the lot of all. From this condition there is no retreat. We in the Americas in particular must realize that the great oceans, east and west, that protected us for centuries do so no longer.

In the second place, the colored peoples of the earth are rising everywhere, from Harlem to Tokyo and Timbuktu. So, a second great cycle, embracing approximately five hundred years, is passing into history. At the beginning of this period the light-skinned peoples of Europe were in imminent danger. Indeed, to the mythical visitor from Mars it might have appeared at the time that they stood a good chance of being either enslaved or driven into the sea. The Tartars still occupied much of Russia; the Moors were still entrenched in Spain; and the Ottoman Turks were striking boldly and powerfully at the southeastern gates of Europe. Then, owing to a number of factors, one of which was certainly revolutionary inventions in the modes of warfare and another the advance of nautical science, the tables were turned. These Europeans took the offensive. They threw off the Tartar yoke, expelled the Moors, halted the advance of the Turks, discovered and conquered the New World, took possession of the islands of the eastern seas,

swept over the Dark Continent, and penetrated the vast expanses of Asia. By the end of the nineteenth century they held nine-tenths of the land surface of the globe and dominated the remainder. As a result of their fabulous successes, they developed a sense of unqualified superiority, identified themselves with the advance of civilization, and assumed that they were destined by their own nature to rule the "lesser breeds" of man forever.

Again the tables are turning. The surviving colonial empires of the eighteenth and nineteenth centuries, the British, the French, and the Dutch, are in process of dissolution. And the colored peoples will not be satisfied until they have achieved equal status among the nations. Nor will they be satisfied until they have removed the last vestige of imputed inferiority which the power of the white man forced upon them.

In the third place, the center of gravity of industrial, military, and political power has already shifted from Western Europe, where it had rested during the modern period down to the end of the nineteenth century. It has shifted east and west, to Russia and the United States. Six of the eight so-called great powers which ruled the world fifty years ago have been reduced to the status of secondary powers by the wars of our period. The fiasco of the British and French attack on Egypt in the autumn of 1956 reveals to all eyes how the mighty have fallen. At present only two great powers remain. If they were alike in their traditions, institutions, and basic values, the situation would be critical, as any student of history would know. Thus, Charles A. Beard, the great historian, wrote to me on July 13, 1945, before the war was over in the east: "The sky is clear and ominous: only two mighty armed powers

are on the horizon. What impends and with what portents? Day and night, I wonder and tremble for the future of my country and mankind." We have reached the point in history foreseen by Alexis de Tocqueville in 1835. Speaking of the Russians and the Americans, he wrote: "Their starting points are different, and their courses are not the same; yet each of them seems marked out by the will of Heaven to sway the destinies of half the globe."

That this situation will change in the decades ahead is clear. We may expect to see the renewal of the British Commonwealth, the integration of the West European states, and the rise of new great powers perhaps in China, India, Brazil, and possibly in other regions of the earth.

In the fourth place, the whole world is threatened by a powerful and ruthless totalitarian movement—Soviet Communism. Stemming from the Russian Revolution of 1917, this movement constitutes a strange and dynamic synthesis of an old Russian revolutionary tradition, out of which Bolshevism came, and Marxian doctrines, Russian expansionism, and Russian Messianism. With a sense of mission rarely equalled in history, the Soviet leaders see the eventual spread of Communism over the entire earth under their inspired guidance and through the extension of Soviet power. Their triumphs during and following the war in advancing their dominion in eastern Europe and Asia confirm these men in their doctrines. The death of Stalin and the rise of Khrushchev to power should deceive no one on this point.

Today the members of the tiny oligarchy in the Kremlin, which holds sway over practically one-third of the human race, believe with the fanaticism of religious conviction that the forces of his-

tory are working swiftly and inexorably on their side. They are profoundly convinced that "all roads today lead to Communism." Through their own Communist Party of the Soviet Union and the network of Communist Parties embracing practically all countries they are subjecting to implacable and pitiless attack the liberal and democratic forces of the world. With cold and careful calculation and guided by the ethics of battle they are promoting strife and unrest everywhere beyond the borders of their own domain. And as they excoriate the decaying imperialisms of the past they seek to fasten on mankind a new imperialism far surpassing in rigor and ruthlessness the colonial systems of the nineteenth century. In Hungary in October and November, 1956 they presented to the world a perfect exhibit of their methods, morals, and purposes.

In the fifth place, war threatens the very survival of civilization. Here is the supreme question confronting mankind in the second half of the twentieth century. While in the past the great destroyer has devoured and enslaved many tribes and peoples, today it places in jeopardy the entire human adventure. We know that total war, waged with the rapidly advancing military technology and with that spirit of ruthlessness which in our lifetime has greatly weakened the sense of mercy and humanity, threatens all the ways and values of civilized life. We know that it constitutes the most dangerous threat to the survival of civilization that mankind as a whole has ever encountered. We must remember that the earth today is a little neighborhood.

Unless this terrible scourge is driven from the earth, no civilization worthy of the name can be expected to endure. Otherwise, with the earth growing ever

smaller and the engines of death ever more destructive, preparation for war may become the all-absorbing interest of mankind until the arrival of that fateful day when time shall be no more. A few short years ago we were contemplating the awful moment when, perhaps without warning, great cities would be consumed in the purple and orange holocaust of atomic explosion. Now we have the so-called hydrogen bomb, which, if let loose in the world, might exterminate the entire population of the earth and render it uninhabitable for centuries. As to what dreadful weapons may lie beyond the veil that mercifully shrouds the future, even distinguished scientists can only speculate. During the present respite, how long or short we know not, we have our chance of building a just and lasting peace.

In the sixth place, the advance of science and technology has put in the hands of men fabulous power for peaceful uses—power over material things, power over the life process, power over the human mind. In 1835, according to the German engineer and economist Leo Hausleiter, the total capacity of machines in the world was approximately 650,000 horsepower. By 1900 in the United States alone the figure stood at 70 million, and by 1935 at over 1 billion. Today it cannot be far from 2 billion. If one horsepower is reckoned as equal to the power of twelve men, this means that the American people have working for them over 20 billion mechanical slaves, almost ten times the total population of the earth. And Leland Olds, formerly chairman of the Federal Power Commission and a life-time student of mechanical power, has recently predicted that power consumption in the United States "might increase six to eight times by 1970." When we consider that the age of atomic en-

ergy, electronics, and automation is upon us, we can see that not only the contours of the economy, but also the contours of labor and leisure, of our whole way of life are certain to be radically transformed. At this point we are reminded of the observation of Aristotle: "If every tool when summoned could work of its own accord, as the creations of Daedalus moved of themselves or the tripods of Hephaestus went of themselves about their sacred work; if the weavers' shuttles could weave of themselves; then the master workers would need no apprentices, and the landlords would need no slaves." Today, of course, in many respects we are far beyond the vision of the ancient philosopher.

Power over the life process is almost equally impressive. Unquestionably the advance and application of medical science constitute one of the glories of our civilization. Our fathers and mothers of the eighteenth and early nineteenth century had little more control over the life process than the people of antiquity. They multiplied without restraint, they lived on a monotonous and badly balanced diet, they were mowed down by disease, and they grew old in middle age. The average expectation of life in the most advanced communities and regions was between thirty and thirty-five years. Today most of the dread diseases of the past have been banished, control over births is widely practiced, and the life span has been raised to seventy years. With further developments in chemistry and the biological sciences, the time may not be far distant when man will be able to fashion himself into whatever image may strike his fancy. Given the present level of our ethics and our social organization we can view such a possibility only with deep misgivings.

The increase of power over the human

mind constitutes, from the standpoint of free society, one of the most crucial problems of the age. Such a society rests not only on guarantees of individual security from the violence of mobs and the arbitrary acts of government, but also on general conditions of life that make possible the development of informed and independent judgment. The advance of technology has created new and powerful instruments of mind control; and the entire process of mind-forming has become more and more organized, or at least subject to organization. The individual has become increasingly dependent for information, political ideas, and social attitudes, upon organized education and the new media of mass communication, particularly the daily press, the comic, the movie, the radio, and television. That these new agencies have enormous power has been demonstrated in our time by both advertising agencies and totalitarian states. If conducted with a high sense of public duty, personal integrity, and devotion to truth, they may serve mightily to promote enlightenment, understanding, and good will within the nation and throughout the earth. In a world as vast in its reaches, as complicated in its structure, and as dynamic in its movements as ours, they are indispensable to the successful functioning and perhaps the very survival of a democratic society. They are also equally indispensable to the totalitarian state.

IV

We enter the atomic age with minds formed largely in pre-industrial times. And the fact must be emphasized repeatedly that the strange technological civilization which has burst upon mankind so suddenly and which is sweeping across the world so swiftly is still in its

early stages. In certain of its phases it is far more advanced than in others. Our functional ideas, our moral conceptions, and our social organization lag seriously behind our modes of livelihood, forms of communication, use of mechanical energy, and scientific knowledge. This lag is doubtless responsible for many of the troubles and conflicts of our time. It is certainly the underlying source of the more powerful and disrupting tensions to be observed within our domestic society and among the nations of the world. To-

day a great gulf stands between many of the stubborn realities of our emerging industrial civilization and our customs, loyalties, understandings, and outlooks. It has been said that "distance has been annihilated, but the sense of distance remains." This could be said of so many things in the world today. The task of bringing our old minds into accord with the facts of the new world is a gigantic and urgent educational undertaking. Indeed, we shall not know peace and serenity until this is accomplished.

Individualized Reading Is Not a Thing!*

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THAT learning to read is an individual matter no authority will deny. Nor is it controversial to say that, within each person's generalized reading ability, there exist unevennesses in skills development. Nor does anyone question that within a given classroom there will be a wide range of abilities in reading, and that the older the group of children, the wider the range. Nor is there much argument that causes of retardation in reading are varied, and usually multiple. While other general agreements might be noted, these seem to be sufficient to point up the fact that whatever the sequence of learning activities provided for children, whatever the time allotments, whatever the reading materials and aids provided, whatever the methods employed, learning to read is and will continue to be individually achieved. Every reader will always differ, in use of skills, in general ability, in preference and taste, in interpretation of the printed page, from all others. A reader is always alone in his reading.

That it is the responsibility of the school to teach reading, no educator will deny. Nor is it controversial to assert that throughout the entire school life of the child attention to the further improvement of his reading skills and abilities is necessary. Nor do teachers reject

this responsibility. Every day of the child's life at school he is faced with reading tasks which, in one way or another, are contributory to his assessment of what is involved in unlocking words, phrases, sentences. And, moreover, increasingly teachers are seeking better arrangements, better materials, better methods and techniques for guiding children in this important cultural acquisition. Teachers are alert to the child's need to read, to read increasingly efficiently and effectually, and to read for many purposes in various kinds of content. A reader is always using his skills in various combinations in comprehending the printed page.

That reading is taught differently from school system to school system, and from school to school is also well known. How reading is taught is, of course, dependent upon the basic beliefs held in the particular situation, the approved process of curriculum designing, the methods suggested, the materials supplied, the competences of the individual teacher. Although there has been, quantitatively, considerable experimentation reported in professional literature, there is much yet to be done. Reading is so complicated a human activity and so dependent on multiple factors for achieving success that, with all the experimentation and research, differing viewpoints about methods and procedures do exist. Even differ-

* A chapter in *Individualizing Reading Practices*, Alice Miel, Editor, Practical Suggestions for Teaching, No. 14. Bureau of Publications, Teachers College, Columbia University.

ences about what it means to read are not uncommon. Because schools do want children to read as well as they can, they use those arrangements for reading which they believe will get the best results. So there is diversity in how reading is taught in every classroom. Even in those school systems where one set of materials and one method are approved, there is difference because no one has been able, if he would, to standardize human nature.

That there is rather common use of group-reading methods and procedures in classrooms today is observable to anyone who cares to take the time to look at practice. The arrangements for groups, the size of the group, the amount of time spent with a group in teaching reading skills certainly differ. But the basic faith that to get children into a group situation, with similar materials, to learn to manipulate certain reading skills is the most widely held belief in elementary schools today. Sometimes the entire class is the group. Sometimes a three-group arrangement—high, medium and low abilities—is employed. Other variations can also be seen. The number of groups formed for teaching reading skills is a matter of practicality. The belief back of such grouping is that here is the most economical, efficient, useful way to teach reading skills to boys and girls, even though learning to read is an individual matter. Though group instruction is utilized, in reality application of that type of instruction by the learner is always unique.

At the present time some questions are being raised, some doubts voiced, some assertions made about the practices currently widely used in guiding children in their skills learnings in reading. Many of these doubts and questions are procedural and practical ones. If learning to read is an individual accomplishment; if

schools *will* succeed in teaching a child to read; if there is no one method that can guarantee, one hundred per cent, results in children's reading achievement, then why not break the lock step in methods and materials for group teaching of skills? Why not truly individualize reading? Is not individualization more practicable than general group procedures? Does not group reading serve better ends when skills are taught individually? If we note and alleviate the specific lacks which a child demonstrates in his reading, will he not progress faster and with greater confidence than if we guess about those lacks and teach to such hypothetical shortcomings in general group situations? Are we taking seriously what we know about the reading act when we use procedures that basically deny individualization?

Not only are such questions as the preceding being raised; some teachers have begun, in their own classrooms, to experiment with different arrangements for teaching reading skills. They are trying so to arrange the time available for teaching reading that a child gets individual attention in learning to be a skillful reader. They are trying to provide practice in reading that is closely related to the demonstrated needs of the child. They are trying to assess more realistically, with the individual child, the strengths and weaknesses of his current performance in using reading skills so that he knows more precisely wherein he is succeeding and where he needs to put his energy for improving his reading ability. They are providing settings that permit the child and the teacher to concentrate quite specifically on the individual child's silent and oral reading, his interests in books, his interpretations of meanings, his attitudes toward the reading process, toward various types of printed

material, and toward different kinds of content. They are encouraging children to choose their own reading material upon which the teacher and child will work together. They are experimenting with forms of record-keeping that indicate the quantity of material read, the specific skills and abilities worked upon, the general direction in which the child is moving in his reading accomplishments. And, for want of a better name, the innovations have come to be known as "individualized reading."

This experimentation in "individualized reading" is gathering momentum. Many teachers, dissatisfied with both the spirit and results of lock-step procedures, are eager to know more about what is involved in changing one's classroom practices in individualizing the teaching of this very important cultural tool. Already, too, there are springing up some unfounded claims, some gross misinterpretations as to what "individualized reading" is and can guarantee. Already one can hear people asking: What is this new method for teaching reading? What are the steps which I must follow to do "individualized reading" correctly? What is the right way to do "individualized reading"?

Certain misconceptions about individualizing reading guidance need to be avoided, else what is basically a creative, insightful approach to children in their self-development as readers becomes a mechanical, rote performance of perfunctory classroom details.

In the first place, "individualized reading" is not a single method, with predetermined steps in procedure to be followed. It is not possible to say that every teacher who would individualize guidance in reading must do this or that. It is not feasible or desirable to present a simple, single methodological formula-

tion of what is right in "individualized reading" which every teacher shall follow.

In the second place, "individualized reading" is not a guarantee of the alleviation, for either the child or the teacher, of all the problems and pressures involved in reading instruction. It does not assure an educational paradise, a perfect state, an ideal situation. Nor does it guarantee untoward results, wherein all children achieve equally well. Nor does it guarantee that reading will be more easily taught and learned—that reading will automatically be fun and play.

In the third place, "individualized reading" does not eliminate group reading. It does not mean that there will never be group-reading sessions, nor that group reading is, in and of itself, bad practice. It does not suggest that the child learns nothing in group-reading experiences. It does not imply that "traditional teachers" use groups, whereas "modern teachers" always guide the child in his reading on a one-to-one basis.

Also, "individualized reading" does not support a laissez-faire attitude toward instruction in which the child merely does what he wants to do because he wants to do it. The child does not prescribe whether or not he will participate in developing skills, what materials will be supplied, what skills he will work on, or any other matter that pertains to professional competence, which is the teacher's role. It is not a soft, unstructured, unplanned, loose use of time and materials. It is not "catch-as-catch-can" in designing or doing. It does not rely upon the whims, the momentary impulses of the learner for its direction, nor upon the casual or sporadic desires of the teacher.

In other words, "individualized reading" is no panacea for all the ills of teaching reading. It can never be effec-

tual in improving children's abilities to read if it becomes a patent procedure, a sentimental devotion, a rite or ceremony, an exclusive ideology, a vacuous symbol, a standardization, a slogan, a dogma. Its usefulness is dependent upon well-defined purposes and values in operation and action, upon creative uses of time, materials, and procedures suitable to the content for consideration, upon critical appraisal and assessment. "Individualized reading" actually ceases to exist the moment procedures replace perceptiveness; routine supersedes reflection; things take over for thinking; custom curbs creativity.

Looked at constructively, the individualizing of reading guidance is dependent upon the existence of certain conditions that release children to learn to read and that undergird whatever specific arrangements and techniques are employed. Some of these conditions are ideationally rooted. Others are organizational. However, whether ideational or organizational, they are both dependent upon the premise that skills in reading are not ends in themselves but rather means to the end of true reading as meaningful comprehension of what the printed symbols are conveying, denotatively and connotatively, from a writer to his audience. Skillful reading, then, is reading in which the individual uses to the best of his ability those skills of comprehension and rate, silently or orally, as the case may be, for the purpose of wresting meanings from what would otherwise remain neatly designed but nonsensical mechanical markings on paper.

ESSENTIAL INSIGHTS

The foregoing suggests that certain insights are essential for a successful program. The teacher who is individualizing skills learnings in reading:

Views reading as one of man's chief inventions for communication. He recognizes that communication through language—speaking, listening, writing, and reading—is a very important means of conveying thoughts and feelings from one human being to another. He sees that reading is an in-taking by the individual of what a writer has put out. He sees, also, that listening and reading are interrelated but not identical; that all the language arts feed each other, but are unique in what they can do for man as a communicator. He recognizes that man has developed other forms of communication—music, dance, painting, sculpture, to mention a few—but that language is probably man's most widely used, direct means of reaching another's mind. He notes that man has developed various media besides the printed page for communicating with language—charts, films, radio, television—but that these serve different purposes than does a book, magazine, or brochure. He understands that printed language is sometimes logical, discursive, utilitarian, and at other times impressive, nondiscursive, aesthetic. In other words, the teacher gets reading in perspective as neither the "be all" and "end all" of communication, nor subservient to other types or media for transmitting ideas and feelings. He views reading as a significant cultural and personal tool that does some things for the individual which no other creation of man can do as well.

Understands that reading is a unique achievement which many persons possess. He sees that there are many influences which bear upon each personality and which affect achievement in reading—home influences, community influences, friendship and peer influences, previous school influences. He takes into

account that such matters as motivation, physical growth, intellectual ability, social-emotional development and the like are all intimately commingled in how and what one reads. He recognizes that what one gets from a printed page depends in a large measure on what one brings, experientially, to that page. He presumes that individuals will be quite different in their urgencies concerning how soon, how rapidly, how avidly, how extensively, how correctly, how deeply they will read. He further presumes that he will meet these uniquenesses differently with each individual, with emphases and aids that seem appropriate to the best development of the child at this particular time.

Recognizes that learning to read is a continuous, cumulative accomplishment. He knows that no reading skill is ever wholly learned at one time, but rather continues to be refined through successive stages of maturing. He sees that practice is necessary for reinforcing a skill learning, and that practice should be appropriate to the specific, demonstrated shortage of the individual. He, further, is alert to the cumulatively diversified use of the skill in different kinds of reading matter, in different kinds of content. He helps the child to recognize accomplishments and encourages the young one to make further improvements. He evaluates for and appropriately with the child such progress as has been made and plans next steps for extending and deepening abilities to read many different kinds of writing.

Is well-informed about reading skills. He is grounded in what is known about skills of rate and comprehension so that he can guide each child effectually to his best accomplishments. He is able to make

pertinent observations concerning the child's eye-movements, change-of-pace rate, word-attack techniques. He gives attention to such skills of comprehension as: noting detail, getting central thought, predicting outcomes, ascertaining organization of ideas, grouping big ideas and supporting data, and "reading between the lines." When appropriate, he is also prepared to help children recognize emotive language. In general, the teacher who will individualize his reading guidance has more than an acquaintance with word-attack techniques. He is alert to see that such word-attack techniques as "look and say," context clues, phonics, and structural analysis feed into other skills of comprehension in such ways that the child is conscious of his use of many skills in getting meaning from written communication.

A MATTER OF MANAGEMENT

The preceding guide-lines are surely important, though not all-inclusive. They do suggest, it would seem, that the teacher who individualizes reading needs to be equally as well-grounded in the teaching of reading as one who uses other arrangements. Which leads to another point of considerable significance, namely that individualizing reading is largely a matter of classroom management. Because one believes that individual attention is necessary, he so arranges his use of time, materials, and procedures that the child is sure of personal attention in his attempts to improve his reading ability. What are some of the matters of management that the teacher arranges so that individualization can take place?

The teacher provides ample time for individual reading and for various kinds of group reading. Two aspects of learning to read go hand in hand: learning

how to be effective and efficient with a given skill, and using that skill in books or periodicals which one is reading for self-improvement and enjoyment. Learning to read and reading to learn are so intimately interrelated that the improvement of a given skill contributes to the refinement of a person's general ability to read. And, simultaneously, the present general level of ability to read with meaning points up the further need to improve certain skills.

Because learning to read and reading to learn are two sides of the same coin, both individual and group procedures have a place in the total reading program. When a child is concentrating on learning how to manage a skill, this is a time for concerted individual attention. What is this skill I need to know? How can I use it to improve my reading? What are some ways I can improve this skill? What practice, for reinforcement, do I need to carry on? What further help do I need? How well am I doing in improving this skill? Here the teacher's direct attention to the child in his efforts to improve his reading skills is highly beneficial.

Other aspects of learning to read, however, can best be achieved in group situations. If part of learning to read is to know that every person gets different meanings from and puts different interpretations on the ideas presented in writing, a group that has read or is reading the same material seems necessary. If choral reading is being done, one must have a group. If all the children need help in becoming aware of how to read a specific kind of content, then it is economical at least to introduce the new type of content to the class as a whole. Such examples indicate that group reading serves very valuable ends, as does reading individually.

The purposes for which reading is

being done give the clues as to whether individual or group procedures will be most profitably employed.

He arranges for individual skills reading and for independent recreational reading. Here are two distinct types of individual reading, both important in a well-balanced reading program. In the individualizing of skills reading, attention centers chiefly in ascertaining the current level of skills development which the young reader has achieved and in improving those skills in which the child demonstrates least capability. In other words, achievement is viewed as cumulative and forward-moving. So much has been accomplished. One is this good. To be better, let's learn to use this skill more effectually.

When attention is being focused on developing and improving skillfulness, there is, concomitantly, great value in the personal approach, in the consideration which the child gets in addition to the assessment of his skills achievements. By the very intimacy of the situation, there is at least the potential that the child will recognize that his teacher is interested in his development, and thus in him. Here is a time in which he can have the teacher's ear. He is, appropriately, the center of attention. He is able to demonstrate his accomplishments, make plans for what to do next, raise questions, share confidences, get suggestions for other things to read, get help on what may be impeding his more rapid progress, indicate likes and dislikes, and so forth. The child can enjoy skills learning because it is personal, functional, rewarding. He can be honestly encouraged because he can feel his own gains and because he feels his teacher wants him to succeed. He can go on working because he sees that such work pays good dividends. He is not

only learning the skill, but also getting help on how to approach skills learnings, on his own.

A second type of individual reading guidance is that in which the child's independent reading for personal satisfaction and enjoyment is central. A modern program in reading provides for a reasonable amount of time at school for the pleasurable pursuit of recreational reading through fiction, informational material, and poetry. This reading for enjoyment is really quite different from reading being done to improve skills. Independent reading may be done in planned periods set aside for free reading, or it may be a choice during a work period, or it may be something that is done when other work is completed. Whatever the specific time arrangements made for its inclusion, independent recreational reading is an integral part of individualizing reading instruction.

Such reading is the proving ground of all skills accomplishments, and more. Here the child establishes himself not only as a person who can read but also as one who does read—who has discovered that books can be an "Open Sesame" to the confirmation, extension, and illumination of his experiences. Through reading he can transcend time and place, be what he is not, go places or become characters that never have and never will exist, and through all this become one with the universal pulse of mankind.

The teacher's role in children's independent recreational reading is as stimulating and satisfying as helping children improve their skills. For he can discuss with them the ideas and perceptions that they are getting from their reading. He can note their enthusiasms for certain types of content, and see that there are more books and periodicals to lead them on in their particular reading quests. He

can provide booklists and suggestions for other books which they might like to sample or read. Again, the personal attention which the child gets, appropriately, from his teacher may encourage him to read more as well as more perceptively, more penetratingly, more discriminatively.

He provides time for children to share their reading accomplishments. As children are developing uses of skills in independent reading, sharing their accomplishments is desirable. Such sharing not only gives the individual satisfaction in his progress, it also extends to the group the benefits of the reading growth of the various individuals. Stories, chapters of books, poems, incidents, anecdotes, conversations, and the like which have been individually enjoyed can be read interpretatively for the pleasure of an audience. Information gained from independent reading can be shared in informal reports, panel discussions, interviews. Book notes, reviews, and recommendations of favorites can be posted on bulletin boards. All these are forms of sharing, and there are still others worth mentioning.

Displays of widely recommended books can be assembled by children. Pamphlet and clipping files can be organized for others to read and enjoy. Individual creative writings of the boys and girls can be made into books and circularized. Group and individual experience records can be shared.

Through various types of sharing, children can see that individuals read for different purposes and in different patterns, that improvement in skills pays off, that much enjoyment is to be had from reading, that shared reading is a delight, that from others' sharing one can sometimes get good leads for what to read next.

The teacher provides a varied, extensive collection of reading matter from which a child can make his choices. To individualize reading enterprises, one needs many materials. He needs both textbooks and trade books. He also needs magazines and newspapers. He needs pamphlets and brochures. He needs commercially-made, teacher-made, and pupil-made practice materials. Diversity of reading matter is important to meet the child where he is in his reading development in skills and in taste. When the teacher is able to supply such a collection of reading matter as has been suggested, the child is likely to be able to select just the thing that, for one reason or another, he really wants to read.

Textbooks written at different levels of difficulty are useful if the teacher is concerned that the child learn skills at his own growing edges. Trade books of different levels of difficulty and of different kinds of content will provide for developing tastes and interests. Fictional and factual books, great stories or classics and the contemporary, realistic and fanciful themes, and prose and poetry will undoubtedly all need to be included to whet reading appetites and to nourish reading tastes.

Moreover, the teacher will surely guide children to sources of book collections beyond the classroom, both the school library and the public library. And he will do what he can to encourage parents and children to begin to build a home library. In all these ways, children are alerted to the wonderful world of books. Thus they are participators in and partakers of ideas and feelings which are available through printed symbols.

He provides a variety of practice materials. As a child reads with his teacher, certain specific strengths and weaknesses

in his skills will be observable. From such observation, what further practice materials can be of benefit to the learner can be ascertained. Hence practice and self-testing materials of considerable range in difficulty and in variety and emphasis need to be available in the classroom. Some practice materials may be commercially prepared, others teacher-made. Some may be in the form of puzzles or games, others may be more directly work-type exercises. Some will be introductory in nature—will help the child understand how a particular skill contributes to effectiveness in general reading ability. Others will be self-testing materials—materials that will help the child see how he is coming along in the mastery of the skill upon which he is working. Whatever the form of the practice material, it should be attractive in format, economical of time spent in using it, and directly focused on what the child needs to know.

Another matter pertaining to the use of practice materials should be mentioned here. Some teachers have been encouraging the child to become competent in selecting his own practice materials. These teachers are discussing with the child the skills which need further practice. They have so organized the practice materials that a child can easily locate what is available to help him improve. They note his choices of practice materials and guide him to increasingly more mature ways of working with exercises, work sheets, and the like. Thus the learner becomes increasingly responsible for reinforcing his learnings and for functionally improving his reading skills.

He encourages the child to select reading matter that extends the learner's growing edges. If a child is to develop soundly in reading accomplishments, he

must read things that are meaningful to him. Sometimes he needs to get information which he can use; sometimes he needs to be entertained by a good story; sometimes he seeks the illumination of life and living through prose or poetry. Because reading serves such varied and numerous purposes in one's life, what appeals to a child at one time is not necessarily the appeal at another. Hence, for the child to choose what he will read—a primer, a picture-story book, a pamphlet, for example—is important. Such choosing motivates the reading. It simultaneously, is directly related to learning how to read. (Is this material too hard or too easy for me? Do I want to read more on this subject? Have I sampled enough to see that I want to read this?) Choosing is deciding to make certain discriminative judgments. (Do I want to get information, enjoy a story, or what? Does this book have too many new terms in it for me to comprehend? Will I be spending my time satisfactorily if I read this?) Choosing means planning. (Is this just like another book I have read? Is this book so long that I'll get tired of it before I finish it? Am I willing to work to read this book well if I choose it?) In summary, choosing means pacing oneself to what one can and will do.

When children select their reading materials from a wide variety of what is available, they are making agreements and commitments to read what they have chosen to the best of their abilities. The teacher probably will have to give some guidance, helping the child to be realistic about his choices in terms of his capabilities, his aspirations, his past experiences. But this too is an important consideration in learning to read, and, as such, calls for individual conferring between child and teacher.

The teacher develops an adequate system of record-keeping. In the individualizing of reading, it is necessary for the teacher to develop a plan for keeping records of each child's current status as a reader. Without systematic record-keeping, both the teacher and the child are at the mercy of their memories on so many matters—what has been read, how much has been read, what skills call for more work, and so forth.

There are some criteria for what makes good records. Among the most important are:

1. Do my records easily and clearly show a profile of progress for each child?
2. Is the record-keeping easily and economically done?
3. Do my records show just what the child has read?
4. Do my records show how much the child has read?
5. Do my records indicate quite precisely my diagnosis of lacks in skills of comprehension?
6. Do my records indicate, simply and usefully, progress made in reading?
7. Are my records kept in such a way that they can be shared with a parent in conference?

Whether a teacher uses a folder, a notebook, or cards, economy, efficiency, and simplicity are keys to setting up one's record-keeping. The procedures should be those that the teacher can manipulate with dispatch and clarity each time the child reads with the teacher.

Another aspect of record-keeping is the development of cumulative reading records of children's independent reading. These records are usually kept by the children themselves. They may be notebooks, folders, cards, or commercially prepared materials. Again, they

should be easily manipulated and economical of time. There are, of course, other considerations for such cumulative records of independent reading. Since this is a record of personal reading, the plan utilized should avoid open competitiveness. Such records should be private rather than public. These records will clearly show what was read and when it was read, but beyond that the additional comments or evaluations should be only those that seem pertinent to the record-keeper. And they should be useful to the teacher and child in periodic conferences, for discussion of the individual's interests and tastes, and for suggestions for further independent explorations in reading.

From these kinds of record-keeping, the teacher gets not only important insights into the individual child as a reader but also valuable clues to the types of reading fare widely used in the classroom, new books to add to the room collection, the kinds of books that he may well read aloud to the group to keep them growing in taste in literature.

He utilizes appropriate evaluation procedures. To comprehend as completely as possible the child's strengths and weaknesses in skills and abilities is basic to success in individualizing reading instruction. To this end, evaluation data are of great importance. From such data, the teacher makes plans for working with a child and develops lines of action for pacing the new learnings to the child's present potentialities and capacities.

Some of these data are what we call objective: IQ records and results of standardized reading tests. Some data are semi-objective: the kind and amount of reading shown on a child's cumulative reading records, the teacher's records, or the child's responses to structured, teacher-made instruments for ascertain-

ing a child's reading habits and attitudes, for example. Still other data are subjective: the judgments of previous teachers; the child's own perception of his reading ability; the teacher's general estimate of how well the child can currently read.

It is to be noted that the uses made of such data, in individualizing reading, are for diagnosis of where the child needs help in reading rather than for rating him as a reader. These data, when used well, point up the reading tasks with which the child needs help. They give focus to teaching and learning. And as new data are accumulated, a child and his teacher are able to note gains, make new plans, change directions, and, in general, do those things which will sustain the progress already made and serve as undergirding for new undertakings in reading. Thus, evaluation is continuously supportive, while realistic. Thus, appraisal is integral with teaching.

He makes appropriate arrangements for independent work for others while an individual is working with the teacher. Independent work experiences for children are regularly a part of every child's school experiences. Provision for such experiences is rooted in the belief that there are values in working alone as well as in groups. Study habits and skills are put to use as children, during independent work times, attack jobs, manage their time, make decisions, consider the rights of others, and achieve results on their own.

While the teacher is working with the individual in reading, other children will, of necessity, be working independently. Some teachers use this independent work time as a general skills period, in which the boys and girls work with practice materials in spelling, handwriting, mathematics, or reading, depending upon the urgency for the improvement of particu-

lar abilities in a skills area. Other teachers plan this time to be devoted directly to reading activities on the part of all the children in the room. Here the independent work choices might be, for example: getting ready to read with the teacher, doing appropriate practice exercises, research reading for preparation of a report in a content area, reading aloud to a friend, or enjoying prose or poetry as literature. Still other teachers plan this time as a work period, with many choices available to children: reading, creative writing, creative art work, small-group enterprises, skills practice, and the like. Whatever the specific arrangements for the use of the independent work time, careful planning and agreements about procedures—so that all the children use their time satisfyingly and well—are essential. When children are involved in making the plans, carrying through on independent work responsibilities, and assessing accomplishments and ways of proceeding, they are doing more than making it possible for the teacher and an individual to work together on reading. They are learning to be responsible, reliable members of a working group.

While success in individualizing the

teaching of skills and fostering independent reading does call for appropriate procedures and arrangements, these are not enough. Individualizing reading starts not with procedures but with a creative, perceptive teacher—one who believes that children want to learn; who thinks with children rather than for them; who basically respects the individual behavior of every youngster; who works with children in orderly but not rigid ways.

Such a teacher sees the individualizing of reading as consistent with the total designing of living with children in the classroom. Individualization of reading, thereby, gears into the larger context for learning, in which, throughout the school day, children are using their reading skills to functional ends:

- To understanding and using ideas
- To acquiring important information
- To solving problems
- To participating in creative activities
- To thinking critically
- To developing viewpoints and ideals
- To evaluating learnings, ways of behaving
- To comprehending culture
- To understanding self and others
- To knowing, being, and becoming.

Education Within Industry*

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FACTORIES today have classrooms, organized programs of studies, textbooks, examinations, even graduation exercises with awarding of diplomas. Some corporations have entire buildings devoted to education. The equipment in many of them is superb, with latest model blackboards, projectors, and sound-recording devices. In one building there are movable partitions on ceiling tracks, permitting a moderate-sized auditorium to be broken up into classrooms—all soundproof. Not all factories, of course, provide such facilities, but they are found to a greater or lesser extent in a predominant number of America's leading corporations and are available under varying conditions to a large percentage of the nation's industrial workers.

Out of 349 replies to a questionnaire¹

* This article is drawn from a forthcoming report by the same authors, *Classrooms in the Factories, an Account of Education Conducted by American Industry*, published by the Institute of Research, Fairleigh Dickinson University, and distributed by the New York University Press.

¹ In addition to the questionnaire, information contained in this article and the complete report was obtained from numerous personal interviews and observations, voluminous correspondence with corporation officials, and hundreds of documents, most of them in unpublished form, used by the corporations in the course of their educational activities.

directed to 482 of the largest industrial corporations in the country, 296, or 84.8 per cent of the respondents, reported engaging in educational activities of some kind, "education" meaning, for the purpose of this study, a definite program in which knowledge or skills are taught according to some predetermined plan, including group meetings, required assignments, and examinations or some other adequate means of judging achievement. Courses of study include recreational, cultural, vocational, elementary, and high-school subjects as well as advanced studies in managerial and supervisory techniques, in mathematics, and in the various branches of engineering. Hundreds—sometimes even thousands—of student employees of a given corporation attended these courses. Many budgets rival those of good-sized colleges and universities, and expenditures per student are not infrequently two and a half or three times the national average for conventional institutions. Faculties are on either a full-time or a part-time basis, and are drawn from industry or from nearby and sometimes distant colleges and universities. Indeed, it can be said without exaggeration that within the last decade, for the most part, a new sector has been added to the traditional pat-

tern of American public and private education.

One corporation² offers 1000 separate courses in managerial and supervisory subjects, with an enrollment of some 6500 students. Its annual budget for educational outlays is approximately \$45,000,000—more than that of any university in the country with but one exception. Another company is establishing in New York City educational headquarters consisting of classrooms, seminar quarters, laboratories, and faculty offices said to be the equivalent in cost and administration of a new engineering school of 1000 full-time students and to represent an initial investment of \$1,000,000. Comparable facilities are being established by this corporation in Chicago and in Winston-Salem, North Carolina. A few years ago a third corporation contracted with a leading university to cooperate in the establishment of an educational program. Over a period of years and at a cost in services of \$100,000, the university and the corporation worked together in formulating objectives, developing instructional methods and materials, and measuring achievement. In addition to its regular program of technical and management subjects, this corporation now offers to provide instruction in any subject for which there is a sufficient demand. Many of the courses are open to the wives and children of employees. No tuition is charged, and textbooks are loaned.

It is quite possible, perhaps probable, that the educational policies carried on by these large corporations—leaders in American industry—are being followed rather closely by American industry in

² In the course of gathering material for this study, the authors agreed not to mention the names of corporations. Subsequently, permission to do so was granted in most cases. The names appear in the final report.

general, at least as far as size and resources permit. However this may be, the 296 corporations known to carry on educational activities account for 6,391,717 employees (1955), or 38.8 per cent of the 16,447,000 (1955) persons employed in mining and manufacturing in the United States. The statistics would seem to indicate that this relatively new sector of education is a sizable proportion of the total educational program of the country.

A SCHOLARLY AND NECESSARY ADJUNCT

Two notions were in the minds of the authors when this study of education conducted by American industry was begun: First, that the courses of study offered were in the nature of fringe benefits—an interesting pastime for some, no doubt, but not too serious from the standpoint of earnest learning. Either this, or else the colleges and universities were somehow failing in their task of education, thereby making it necessary for industry to fill in the gaps. Both of these notions were soon abandoned as utterly untenable.

In the technical area, new employees entering industry cannot be expected to know all the details of every specialized industry that may require their services. If a career in business machines is chosen, the graduate will probably not be versed in all the details involved in the design and production of analog computers, the principles of circuit logic, or the techniques of electric-computer design. If it is the airplane industry that he plans to enter, he will probably have to learn something about fuselage construction, collective pitch throttle synchronization, and drive-train systems. Or, if contemplating the petroleum industry and confronted with a modern fluid catalytic

cracking unit, with its sixteen stories and three acres of pipes, valves, furnaces, vessels, pumps, and controls, he could hardly be expected to know very much about the practical operation of such a monstrosity.

Specific course descriptions in the technical field are usually meaningless to most laymen. Three examples are cited, however, to dispel any notion that education within industry is superficial.

PRINCIPLES OF CIRCUIT LOGIC

Formal and intuitive approach to functional circuit design. Boolean algebra, relay and diode switching, coding, translating and converting; decimal, binary, and coded-decimal adders, accumulators; miscellaneous circuits. Emphasis on logic rather than component. Lecture, discussion, practice exercises.

AERODYNAMIC FLIGHT TEST

The basic theory of flight airspeed and altitude, techniques of data measurement and reduction, determination of static and dynamic flying qualities, performance measurement, thrust determination, and flight-test techniques employed to isolate and eliminate deficiencies in flying characteristics.

THEORY OF ELASTIC STABILITY

Buckling, lateral buckling, beam column, second- and fourth-order differential equations for buckling, buckling for single-span rod, solutions for pinned pin and fixed pinned, elastic curve of fixed-free columns, energy method of buckling, finite difference methods or any end conditions, stepped column, plates and cylinders under end loads, shear loads, and normal loads.

Some of these and similar courses occupy 100 hours, many from 60 to 70 hours, others from 30 to 40 hours. Returns from the questionnaire previously mentioned indicate that, of the 296 corporations conducting educational activities of some kind, 201, or 67.9 per cent, offer technical and professional courses such as the above.

Once oriented to the mechanical intri-

cacies of a given industry, moreover, there is the problem of keeping abreast of the never-ending stream of new inventions flowing from the experimental laboratories and the research centers, and of comprehending the rapid development in such areas as atomic energy, automation, and electronic data processing. As never before, corporation personnel must be continuously informed and must remain flexible—ever receptive to change. Meetings of professional societies, technical publications, and informal contacts all contribute to this end. But many companies provide a more systematic and formal procedure. One company employs engineering professors from nearby universities, and the company engineers attend their courses during the day, on company time. The subject matter varies according to need and current developments, as does the time allotment. Classes may be held several hours a day, or two or three times a week. Another company provides a two-fold program, one on company time and one after hours. Both are carried on as seminars. The company-time seminars are held intermittently, are restricted to invited personnel, and are on a strictly post-doctoral level. Topics having to do with the latest scientific developments are discussed—sometimes by company engineers and scientists, sometimes by visiting specialists from industry or the universities. After-hours seminars are held weekly and are open to all engineering personnel. Some current development in the industry is described by a guest speaker whose talk is followed by an hour of questions and discussions.

No one conventional institution could hope to offer all the advanced courses necessary to prepare graduates adequately for the varied industries requiring their services, or to keep personnel informed

concerning new developments in so many highly specialized fields. The administrative problem alone would be baffling, and the financial investment in laboratories and machines necessary for such a wide range of highly specialized teaching would be prohibitive, especially when such equipment can become outdated so quickly. Advanced technical education conducted by industry, therefore, is no encroachment upon the prerogatives of the conventional technical institutions; it is an activity superimposed upon the existing educational structure by necessity, and a development that can well be regarded as an inevitable consequence of cumulative knowledge and the ceaseless march of minute specialization.

Another main section of education within industry concerns management and human relations, the latter, although an integral part of managerial and supervisory development, being customarily treated in separate courses. Specialization and the accumulation of new knowledge and techniques in this area are comparable, in both extent and significance, to the situation in the technical field already mentioned. In the late nineteenth and early twentieth centuries, Frederick W. Taylor (1856-1915), the generally acknowledged originator of scientific management, took industry to task for its haphazard methods of production. Centering attention upon the individual worker, Taylor demonstrated how systematic work organization could increase productivity. This emphasis upon the worker may be said to have paved the way for Elton Mayo (1880-1949), who conducted exhaustive experiments in the Hawthorne works of the Western Electric Company for a period of twelve years (1927-1939), but, whereas Taylor concentrated on time and motion, Mayo studied thoughts and feelings, showing

correlations with productivity quite as striking as anything developed by Taylor.

Since then, a veritable revolution has taken place in industrial management. Instead of centering upon production and regarding workers merely as instruments to that end, with a natural disinclination to put in a fair day's work, progressive management is now employee-conscious. The worker is respected as an individual. The factory, although still a hierarchical structure, is looked upon as a social institution, however vast and complex, and management is being judged increasingly by its ability to give work satisfaction. The day of intuitive decisions, crude methods, and dominance by a forceful, if sometimes arbitrary, personality has passed. Instead, certain knowledge, recognized skills, and an ability to inspire cooperation are required. For this new approach to industrial management, special training is required. Of the 296 corporations offering educational programs, 268, or 90.5 per cent, reported having courses in management and supervision, and 253, or 85.4 per cent, reported teaching human relations.

Probably most college graduates know something about human behavior, including motives, goals, inhibitions, frustrations, attitudes, basic drives, and maladjustments that, all combined, go to make up personality and determine morale. But it is doubtful that many know the best techniques for creating high morale in industry through engendering a sense of belonging, assuring recognition, providing new experiences, establishing a feeling of security; in short, providing work satisfaction which counts so heavily in productivity. Fewer still are likely to understand the full significance of upward and downward communication and their effect upon the worker, the best methods

to use when counseling and conducting conferences, or how group attitudes get started and help or hinder the day's work. Such things must be superimposed upon college courses, carrying the employee student into a realm of functional activity quite beyond the possibilities of college instruction.

Certain technical and management courses are incorporated in integrated programs. Orientation for newly employed engineers, for example, usually includes courses of study combined with temporary assignments and observations, frequently requiring visits to various plants throughout the country. Management and supervisory courses for selected new recruits are similarly arranged, and, even when these courses are open to all qualified candidates, a specific sequence of study is advised. Orientation programs vary widely in length and intensity, according to the level of employees being inducted. For newly employed factory workers, the period may be only a few hours of formal class work, followed by informal on-the-job instruction. On the other hand, young engineers recently graduated may spend as long as two years learning the industry before a permanent post is assigned. Orientation programs of some kind are commonplace; of the 296 respondents to the questionnaire who conduct educational activities, 276, or 93.2 per cent, reported some type of orientation instruction.

Besides the technical and management courses incorporated in integrated programs and the technical seminars explained above, some companies offer a wide variety of courses, generally open to all employees who can benefit by them. Judging by the replies to the questionnaire, the number of corporations pursuing this policy is not large. Only 47, or 15.8 per cent, of the 296 respondents

reporting educational programs answered this question affirmatively. Where such programs are offered, however, they are generally extensive, include a wide choice of subject matter, and are well attended. A consolidated index listing such general courses offered by six corporations, selected at random, shows 448 separate titles, many of them being duplicated in the six lists. Almost half are technical subjects on various levels of complexity; 89 have to do with various aspects of management; 28 are office subjects; 25 teach advertising and sales techniques. There are 17 courses in physics and chemistry, 15 in human relations and psychology, 15 in elementary and high-school subjects, 14 in orientation, 10 in economics, and 4 have to do with research procedures. There are only 17 purely avocational or recreational subjects.

The few subjects that might be classified as cultural, that is, concerned with the liberal arts as distinct from vocational, technical, and professional, indicate no lack of interest on the part of industry in the broader aspects of education. The percentage of business executives in leading American corporations holding non-technical degrees seems, in fact, to be increasing,³ and most large corporations today maintain cooperative arrangements with various colleges and universities, enabling employees to study part time at traditional educational institutions. Many of the corporations defray a part of the expense and some of them pay all. It is not unusual, furthermore, for a corporation to grant a leave of absence to a

³ Harold S. Sloan, *Challenge Magazine*, December, 1953, New York University Institute of Economic Affairs. A summary of this study appears in the complete report from which this article is drawn. See also W. Lloyd Warner and James Abegglen, *Big Business Leaders in America*, Harper and Brothers, New York, 1955, p. 48.

young executive slated for advancement, permitting an extended time for liberal arts studies. This aspect of education, however, is still left largely to the colleges and universities.

FOUR CHARACTERISTICS

In contrast to university tradition, four characteristics of education within industry soon became apparent to the authors. First, the notion that education ends with a college degree is completely untenable in industry today. Indeed, without conscious and continuous learning, the aspiring young executive or the business professional becomes dated, figuratively speaking, overnight. Of course academicians have long given voice to this idea as an important element of the good life, but the concept of "commencement" betrays the thought, "Commencement for what?" Obviously, for one's lifework, the preparatory education having been completed.

In the second place, employee students attending classes conducted by industry are more highly motivated than college students. The motive is nothing short of a life career in some absorbing creative activity, with constant shifts and changes to challenge the imagination. To that end, the trainees report that they work at their preparation longer hours, more intensively, and more purposefully than they did at their college tasks. "Now we are playing for keeps," they say, and mean it.

This spirit of dedication is sensed in the urgency that permeates the classes conducted by industry. At one moment the men are in the factory, facing problems, hearing complaints, adjusting difficulties, explaining, instructing, and smoothing out maladjustments as best they can. The next moment they are in the classroom, listening to the experience

of their co-workers, discussing and analyzing counterparts of the very situations that they faced earlier in the day and will almost immediately face again. From an experienced instructor, they receive constructive criticism and helpful suggestions, and learn of new techniques constantly emerging from study and research. This is vital education indeed, a blend of learning, applying, reporting, and relearning that plumbs the very depths of reality on the one hand and, on the other, reaches out for the new and improved as revealed by experiment and research. No artificial motivation is necessary—the daily work life supplies it; and no distant use of knowledge gained need be envisaged—it will probably be needed that very afternoon.

Then again, in college the objective of one's studies is seldom immediate utility. Presumably, what is taught is useful, but this is a by-product of broader concepts—the development of an understanding mind, the creation of an effective personality, or the acquisition of the basic knowledge of a profession. In industry the immediate objective is invariably utility—perhaps the most effective methods of management, the most approved process of production, or just the best way of getting along with co-workers. Of course even the most functional instruction may carry the student far beyond the limits of knowledge immediately applicable to a given situation. Mathematics is a prerequisite for handling business machines in almost any capacity, a study of petroleum can hardly escape beginning somewhere within the area of economic geography, and certainly anything learned about human relations is applicable far beyond the confines of a single organization. Nevertheless, these broader concepts are usually adjuncts, not ends in themselves.

Finally, the philosophy of education within industry is definitely pragmatic. Does it work? If so, improve it; if not, stop it. And there are ways of finding out seldom available to the university instructor. One example will have to suffice. The training department of one corporation found that the executives spent an average of four to five hours a day in reading, including the time spent both in and out of business. Much time could be saved, it was thought, if the executives could learn to read faster. A course in reading improvement was organized. Tests showed that those who participated in the course started with an average reading speed of 243 words a minute and a comprehension score of 65 per cent. Subsequent tests, at the end of the course, indicated that the average reading speed had advanced to 459 words per minute, with no decrease in comprehension. This looked like an improvement of over 89 per cent, or a saving of over two hours a day. The course was continued, and so were the tests. After an interval of three years, over half of those who had participated in the first course were retested; 50 per cent were found to be reading even more rapidly than they had at the completion of the course. However, the average for this particular group, after three years, had dropped from 403 words a minute to 392. Even so, this group had started the course reading only 226 words a minute; an improvement was indicated, therefore, of 78 per cent, and it seemed to be permanent. The training department still has some reservations. Tests will be continued, but results to date warrant going on with the course.

The philosophy of pragmatism, furthermore, permits many procedures that have not yet attained widespread academic respectability. The teaching of

creative thinking is a case in point. This, in short, is simply training people to think up new ideas. The theory is advanced that of the two main kinds of thinking—judicial and creative—the former constitutes a large part of formal education and grows with experience, while the latter is neglected and atrophies with nonuse. Industry has gone about correcting this neglect. In one company 500 students graduated from a course of this kind in 1955; in another, 1400 students completed such training in 1956. Of the ten largest corporations in the country, nine offer this sort of instruction in one form or another. In 1955 one company reported that 400 graduates of its creative engineering program had developed new processes and patentable ideas at an average rate nearly three times that of its nongraduates. Another company has authorized the statement that after twelve sessions the students showed an average improvement of 79 per cent in their flow of ideas. Others report similar results. The scheme works, and many industrialists hope that the hesitant colleges and universities will one day catch up with it.

A NEW EDUCATIONAL FORCE

Two great educational innovations of an institutional nature have helped shape the civilization in which we live. The first had its beginning in the latter part of the thirteenth century, when groups of teachers, scholars, or both banded together in the form of medieval guilds to secure mutual protection and unmolested seclusion in the pursuit of knowledge. Thus were inaugurated the first permanent organizations for the transmission of learning. The second was the establishment of the American free public-school system, accomplished, in principle at least, at the close of the second quar-

ter of the nineteenth century. From the first has evolved the modern university; from the second, the conception of universal education, supported by the people and free from both the taint of charity and the influence of selfish interests.

The authors believe that we are now witnessing in the educational activities of American industry the birth of a third educational force of far-reaching consequences. For, just as the first has perpetuated learning, and the second has pro-

vided the bulwark of democracy and a free economy, so this third innovation is adapting civilization to a new technological era, the ultimate consequences of which stagger the imagination. Nor is this merely an adjustment to mechanical wonders; it is an integration of new technical skills with revitalized human relationships, envisaging a world augmented not only in material comforts but in spiritual values as well.

The Educational Leader and Intergroup Relations*

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WITH earth satellites wending their portentous ways across the sky, some watch in pride, some in wonder, many in fear. Again it has been demonstrated that intercultural and interracial conflicts, prejudices, and discriminatory practices represent a form of self-indulgence no one can continue to tolerate. However, more than "tolerance" is needed; deep and mutual understanding and acceptance are essential. Such is the educational challenge of today.

BELIEFS TO BUILD ON

There are certain basic assumptions, among them the beliefs that:

Every man has dignity as a free moral agent if he affirms in his own personal choice the covenant that makes the common life possible.

Every man has dignity as a worker if he gives his life in service that makes the common life actual.

Justice affirms every man's right to be respected as a man, as an end in himself, never as a mere means to others' ends.

Love affirms every man's destiny to find life for himself only as he gives life in service to the whole community.

Democracy has meaning only in so far as that kind of love forms its motive and that kind of justice its goal.¹

* An address before the conference on Human Relations Education, Rhode Island College of Education, November 8, 1957.

¹ Gregory Vlastos, *Christian Faith and Democracy* (New York, Association Press), p. 26.

The central concern of this discussion will be to consider the educator as a person in his role, influential or impotent, in development of the community. Second, what is required for effective social action against the forces of prejudice and hatred? Segregation and discrimination bring into bold relief a general problem of man's relations with man. Finally, what part can the educator play in dealing with human relations which lead directly to more serious problems in local, national and world affairs?

Dr. Eric Mosse² tells a poignant story with an application for intergroup relations. He was walking through Central Park late one afternoon. It had been raining, and through the mist he could see an old man bending down to a sparrow. For a moment it seemed as if the two were conversing. The old man's beard was ragged and unkempt. He wore shabby clothes and high rubber boots; his entire appearance was that of those disturbed and lonely persons one occasionally sees feeding the squirrels and pigeons. Here, however, something seemed different. This man's whole body was bent so far that his old head almost touched the earth. There was a strange smile on his wrinkled face and the humble gesture made him seem like a mod-

² Eric P. Mosse, *The Conquest of Loneliness*. (New York, Random House, 1957), pp. 240-41.

ern Saint Francis. A little boy of about eight stood a few feet from him. He was dressed in a cowboy suit, a pistol in his broad leather belt. He delighted in "shooting" and "killing" in a playful way. His hand on his pistol, he apparently debated for a moment whether or not to shoot at the man. Something evidently made him decide not to, and he stood there, silent and a bit tense. Finally he walked toward the stranger slowly and shyly and bent down beside him. After a few seconds the bird fluttered away. It began to rain again and the last Dr. Mosse could make out through the fine drizzle was the picture of the two standing together engaged in conversation.

It is rather easy in thinking of intergroup relations to consider only the Negro or the Jew. Let us not forget to include our inadequate relations with the Russians, the people of India, the Arabs and with the child, the panorama of his world's values and beliefs, his growing insecurity, fear, and uncertainty. In the midst of plenty, boundless opportunity, and the glorious promise of the wonder-filled future, today's fear, insecurity and despair can tomorrow destroy the five-year-olds, the eight-year-olds, and the ten-year-olds who are growing up in our schools and homes. Beaumont, Clinton, Sturgis, and Little Rock will be history then. Are we, as educators, prepared to write tomorrow's history with today's education?

STATUS OF THE TEACHER

What kinds of individuals are the classroom teacher, the administrator, the specialist, and numerous others who hold educational jobs and who are to meet the challenge of education for intergroup living?

The large majority of these men and

women are dedicated people. They have diffuse but very real resentments and difficulties. They soon recognize that not only will teachers be underpaid but they will be, even in their own profession, second-class citizens. Teachers often believe monetary rewards and prestige will go to those in administrative and supervisory positions only. That half of the young men teachers will want to get administrative jobs is as startling as it would be if half of the young doctors wanted to become hospital administrators or half of the young actors wanted to become talent agency executives.

EDUCATION AND TEACHING

We may assume that to be an educator is to teach. This, however, is not necessarily true. In fact today the teacher in the classroom is continually reminded of the importance of submitting promptly his requisitions, of budgets, maintaining records, sitting on committees which are often perceived as non-productive, and wherever possible of providing demonstrations of the unique contributions of his field or department, institution or community. He pores over endless schedules, building plans, curriculum studies and reports. Frequently he finds he has had only a rare glimpse of the student as a person. The teacher who maintains that his first responsibility is to teach and to support the growth and development of each student as a citizen of dignity and worth frequently feels that his principles are lost in the shuffle.

EDUCATION FOR WHAT?

Too many students who plan to teach are anxious to collect course credits because the communities they will eventually serve will not pay them enough to live on unless they have degrees. This incentive, which many of the critics of

modern education have helped to instigate, cannot possibly develop an attitude of concern for students as individuals, or zeal for the proper study of mankind and of his world. As long as the community regards the teacher as a second-rate citizen, and makes him complacent by giving him "thirty pieces of silver," educational leadership cannot be expected to demonstrate the proper concern for the dignity and rights of people of all races and religious beliefs.

Pre-service and in-service teachers are frequently cowed and feel confused and resentful at a society which saddles them with blame for all the delinquency, lack of values, inability to think and illiteracy of young people; a society which, at the same time, provides very few means to avert those deficiencies. It is time that the responsibilities of the total society be examined. We must look especially at the responsibility of the press, radio, and television which, with noteworthy freedom in our democracy, have been able to take pot shots at the teachers, the schools and education, yet are free from blame for the consequences of their cute and supposedly insightful observations. Where educators have side-stepped the issues they should be held accountable. But educators in general should not be made whipping boys for a total community.

Members of an adolescent group participating in a research study, complained that their parents were so busy with community committees to improve education and prevent delinquency that they had no time to talk with or to help their own children with special problems of growing up.

There are relatively few teachers who really regret the abolition of corporal punishment, the integration of Negroes and white people, or even the adulteration of teaching and learning with activi-

ties which some believe would be more appropriately pursued outside the school—in the family or community center. However, teachers are not psychiatrists, policemen, prison wardens or entertainers. If society lets a child's family live in a slum, if the father forms his opinions from the irresponsible editorials of a half-informed or biased press, if parents are required to carry two full-time jobs in order to pay for the color television set, then that child's teacher is likely to feel that it is a little excessive for the school authorities to expect him to teach the child algebra, build his character and develop his citizenship all at the same time.

Adequate salaries or increased respect will not alone provide the panacea. They do represent in a way the influence "educational leaders" have in many American communities. Thoughtful educational leaders ponder what they or we can expect the schools to do about the critical problems of intergroup relations.

SCIENCE AND SENSE

The Sputniks would hold promise, not threat, if we lived in One World. If the critics of the modern schools would study the facts they would find that teachers and administrators have fought for the freedom of all men in the South, North, East and West often with real jeopardy, while many of the critics themselves have taken advantage of political asylum.

During the past year thoughtful men have at one moment pointed to statistical evidence which indicates that Negroes can never be as intelligent or read as well as white people and almost at the same moment others offer evidence that they can. I happen to believe the evidence that, given the proper opportunities to develop, Negroes can and will compare favorably with white people.

Today the voice of basic science is

raised in protest against the modern school and in favor of strong educational disciplines such as science. Science is suddenly important because of our inability as civilized men and women to resolve our discriminatory practices. The Russians refuse to live with us and we refuse to live with them. The issue was the same when men fought with bows and arrows. If Negroes were proved intelligent, cultured, and productive beyond a shadow of a doubt, we would still have the same basic intergroup relations problems to deal with.

Now what is required for effective community action? Until people of different races and creeds can and want to live together in the same neighborhood or multiple-dwelling, there is little hope of achieving true desegregation in the community. However, desegregation in housing cannot really be achieved or maintained through legislation any more than we can by force facilitate any other social change which the public is unable to accept.

A growing body of social science research suggests certain principles upon which effective social action may need to be built.³ These studies indicate that direct social contact of people of different races will be effective in reducing discriminatory attitudes and acts only if people are able to exchange or share social attitudes. This sharing may not, in fact need not, be communicated verbally or explicitly. The ability and capacity for attitudinal changes will be evidenced in the behavior of the persons involved.

Recent social science research has also indicated that we are effective in communicating an attitude only when the

³ Leon Festinger and Harold Kelley, *Changing Attitudes Through Social Contact* (Ann Arbor, University of Michigan Press, 1951), pp. 69-75.

other aspects of the relationship between the persons involved are supportive of continued interaction and mutual acceptance; that is, in interpersonal relations, power relationships, and the like. A community or group of people held together by a common commitment to a range of shared interests in community needs and activities, and who carry on communication about their attitudes and opinions on these matters and wherein they differ, will have achieved the conditions for attitude change with respect to minority groups when these are present.

EDUCATION IN ACTION

Finally, interpersonal and intergroup contacts will apparently not be effective in changing attitudes of members of one race toward the members of another race or religious belief, if they merely talk about this aspect of their relationship. In short, it requires more than fine words and the exhortations of democratic platitudes to teach us how to behave differently in these relationships. What, then, is basically required for effective social action against the forces of prejudice and hatred?

Let us consider what the educator can do when confronted with problems of intergroup relations either as teacher in the classroom, or as a citizen with a special role in the community. There are two parts to this issue: first, some principles of re-education the educator may use when confronted with discriminatory attitudes; second, some action steps available for work with students or the public in dealing with such problems.

The re-educative process must affect the individual in three ways.⁴ It must change the way he sees the physical and

⁴ Kenneth D. Benne and Bozidar Muntyan, *Human Relations and Curriculum Change* (New York, Dryden Press, 1951), pp. 25-61.

social worlds, including all of the facts, concepts, beliefs, and expectations. It must modify his attractions and aversions to groups and group standards, his feelings in regard to status differences, and his reactions to sources of approval or disapproval. Furthermore, it must affect his motoric action, that is, it must involve the degree of the individual's control over his physical and social world and movements. To accept the fundamental nature of these characteristics of the process one must also recognize the existence of certain conditions.⁵

1. The processes governing the acquisition of normal or abnormal behavior or attitudes are much alike.

2. The re-educative process has to fulfill a task which is essentially equivalent to a change in culture.

3. Even extensive firsthand experience does not automatically create correct attitudes, concepts, or knowledge.

4. In any situation we cannot help but act according to what we perceive; and our perception extends to two different aspects of this field. One has to do with facts, the other with values.

5. As a rule, the possession of correct knowledge does not suffice to rectify false perceptions.

6. Incorrect stereotypes (prejudices) are functionally equivalent to wrong concepts (theories). They are not accidents.

7. Changes in sentiments do not necessarily follow changes in cognitive structure (how we think).

8. A change in action-ideology requires genuine acceptance of a changed set of facts and values and a change in the perceived social world.

⁵ Kurt Lewin and Paul Grabbe, "Conduct, Knowledge and Acceptance of New Values," *The Journal of Social Issues*, 1:53-64, August 1945.

9. Acceptance of a new set of values and beliefs cannot usually be brought about item by item. Hostility must be changed to open-mindedness and friendliness to the new culture as a whole, and this must precede conversion in any single item of the re-educative process.

10. Finally, the individual accepts the new system of values and beliefs by accepting belongingness to a new group.

An able young Negro student in Little Rock was interviewed by a reporter before the Federal troops were placed on guard duty in that city. He stated that the looks on the faces of the civilians and Arkansas Guardsmen were so hostile that they figuratively bowled him over. Segregation and discrimination are products of a field of forces which can be modified only by reducing or removing forces, strengthening or adding forces, or changing the direction of the forces. Whether in the classroom, on main street, or in the town hall, the educator must determine which forces it will be possible and strategic to modify in dealing with prejudice. He must decide, in terms of his role and his influence, whether there are some forces whose direction can be reversed. He must decide which opposing forces, in his setting, can be reduced or augmented with a minimum of coercion. Whatever we do, we must be certain that the planned change will have the elements of reasonable stability.

THE WOODS THINNED OUT

An attempt has been made in this discussion to indicate a scheme which will emphasize the relationship between the educator and his publics as a dynamic pattern. As an aid to thinking about this relationship it may be helpful to remember that:

1. The existence of each individual may be seen as a continual struggle to satisfy needs, relieve tensions, maintain equilibrium.

2. Most needs in our culture are satisfied through relationships with other individuals or groups.

3. For any individual the process of employing his relationship with other individuals to satisfy his needs is an active rather than a passive process.

John Hersey concludes his book *The Wall* with this statement:

At first we were in a second growth, full of thickets, tangled with vines; then for a little time we were among older trees that

climbed far above us, while underfoot there were tender ferns and delicate grasses. Again we came in thicker undergrowth among smaller trees, and the canopy over us became torn here and there; we saw the sky; the woods thinned out, and we were among bushes and clumped grasses. We moved forward, the footing became irregular. We entered some swamps. For a while we could step from hummock to hummock, but later we had to wade, until at last we were up to our hips in water and mud—but how clean! Beyond the swamp we climbed once more onto higher wooded ground.⁶

This may well be a description of the changing role and process of the educator in dealing with intergroup relations.

⁶ John Hersey, *The Wall* (New York, Alfred Knopf, 1950), p. 632.

Television and Education: A Critical Analysis*

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DURING the past six years a total of more than \$60,000,000 was spent for the purpose of assaying and promoting educational television. The Fund for the Advancement of Education alone, under the giant Ford Foundation, has allocated some \$23,000,000 for purposes of sponsoring a variety of experiments with television as a medium of instruction at the elementary, secondary, and collegiate levels of education. In this connection, a number of colleges and universities have been offering both on-campus and off-campus courses for academic credit via closed- and open-circuit television.

Various progress reports stemming from these investigations appear to indicate that students learn just as effectively through television as they do through the conventional classroom situation. In other words, these studies seem to identify no significant differences in learning achievement between the experimental or television groups and the control groups. In a few instances the announced findings of certain experiments have gone so far as to favor somewhat the medium of television over the usual classroom

methods. There are, however, some very serious reasons for challenging the tenability of these findings. Despite these reservations, there are some educators whose imaginations have been fired to the point that they are able to view the potential development of educational television with the most remarkable optimism. In the words of Dr. Thomas Clark Pollock, Dean of the Washington Square College of Arts and Sciences at New York University:

It now seems clear that television offers the greatest opportunity for the advancement of education since the introduction of printing by movable type. This comparison is made soberly.¹

While all this may sound promising and exciting to the cursory observer, one should bear in mind that the advent of the motion picture and radio also brought vivid promises of a revolutionized educational program at all levels of instruction.

The Fund for the Advancement of Education is now serving as a great financial bulwark for experimentation with television as a medium of education. Moreover, under the sponsorship of the Fund, Dr. Alexander J. Stoddard has made an investigation and has blueprinted

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¹ As quoted by Alexander J. Stoddard in *Schools for Tomorrow: An Educator's Blueprint* (New York, The Fund for the Advancement of Education, 1957), p. 27.

a report on educational television. Discounting all fears that television in education endangers the teacher's job, Stoddard writes:

Already there are those who talk of television in education as putting teachers out of jobs. Is it likely that multiplying means of communication will make teachers less necessary? It should enhance their importance. One purpose of television is to help enrich teaching—to bring something worth while into the classroom or school that might not be possible otherwise.²

Although Stoddard's statement may sound quite reasonable, he makes what appears to be a contradiction to the above premise by proposing a plan whereby the use of television in classroom instruction would abrogate a sizable number of teaching positions. At the elementary school level, Dr. Stoddard's plan involves a rotational system whereby half the youngsters would be subjected to television for one half of each school day, under the watchful eyes of nonprofessional monitors, while the other half of the pupils would participate in regular class activities, under the guidance of a certified teacher. The schedules would then be reversed for the remaining half of the school day, effecting a real economy in the number of professional teacher personnel required to man the classrooms. In the words of Stoddard:

While too much in savings cannot be claimed for the plan until experience demonstrates its possibilities along this line, it is rather obvious that some teaching positions could be absorbed in this way. If a net of only two positions were eliminated in a school, and it is evident that at least this could result, possibly some two hundred positions could be absorbed in a city of 500,000 population. This number could accumulate to more than 50,000 throughout the country, even eliminating many small school or-

ganizations in which the plan might not be practicable.³

At the junior and senior high school levels, Dr. Stoddard proposes a design whereby one head teacher and a nonprofessional assistant would handle from 500 to 600 students in two subject areas, where normally four teachers would be required. The regular classroom teacher, under this plan, would precede and follow the telecast with supplemental instruction. Here again Dr. Stoddard describes this plan as effecting a reduction in the number of trained teaching personnel required in our secondary schools:

Assuming that even six teaching positions might be saved in the usual junior or senior high school, the number would mount rapidly in a whole school system. In a city of 500,000 population, possibly as many as or more than 150 teaching positions might be absorbed. In the country as a whole, more than 50,000 positions could be involved. It is thrilling to contemplate what could be done to improve the profession of teaching, to raise the level of school efficiency, to provide badly needed augmented services for young people in the schools, with approximately \$500,000,000 that would be involved in the absorbed positions at all school levels! It would make possible the use of television everywhere in schools, meeting both the equipment and program costs involved.⁴

It is difficult to follow Dr. Stoddard's reasoning as to how the elimination of 100,000 teaching positions at the elementary and secondary levels throughout the United States could be translated as "a program for improving the profession of teaching." Dr. Stoddard has gone so far as to point out that all this economy in professional teacher personnel could offset the required equipment and program costs of educational television for our elementary and secondary schools. The question remains, however, Are the edu-

³ *Ibid.*, p. 47.

⁴ *Ibid.*, pp. 50-51.

² *Ibid.*, p. 30.

cational advantages of television sufficiently great that our nation could afford the elimination of 100,000 live teaching positions? Moreover, in the event that television as a medium of instruction should, in itself, offer no highly significant advantages over conventional classroom procedures, we must raise some serious doubts as to whether such conversion to television can be justified as a possible solution to the growing teacher shortage. Surely, there are other ways of solving the crucial teacher shortage—including the raising of salaries, the lightening of teaching loads, and the improvement of general teaching conditions and teacher personnel policies in the schools of our nation.

Let us examine more closely the bases upon which Dr. Stoddard and Dr. Pollock view the future of educational television. As emphasized earlier in this discussion, preliminary findings of experimental studies with television as a medium of instruction reveal no significant differences between the experimental or television groups and the control groups in subject-matter knowledge. The findings of one university study, financed by a grant of more than \$135,000 from the Fund for the Advancement of Education, reveal that students prefer conventional small-class instruction to either television or large-class instruction.⁵ Moreover, this investigation reported that the major cause of student dissatisfaction with television as an instructional medium was the lack of student-instructor contact. The series of experiments indicated that this lack of student-instructor contact was regarded as a more serious defect of television classes than even large enrollment classes. To add fuel

to the fire, it was discovered that students in the television classes tended to become increasingly disenchanted with this instructional medium as the semester progressed, with virtually all shifts of opinion occurring in a negative direction. Moreover, student ratings of the course reveal that the perceived significance of the course content is significantly higher for the conventional classroom or control group than for the television or large enrollment groups.

With these significant attitudinal differences toward television and conventional small enrollment classes, how can one explain the lack of significant differences in subject-matter achievement as measured by objective examinations? We do not know the answer. Until more experimental studies are made, we can only hypothesize at this point. To begin with, we must emphasize that, until now, most investigations concerning "learning effectiveness" via television as contrasted with traditional classroom situations are designed to measure the knowledge of subject matter. Many educators would hasten to point out, however, that subject-matter knowledge is only one type of learning, and that it may be relatively insignificant in its most measurable form. Other types of learning include changes in behavior, capacity for critical or reflective thinking, growth in certain appreciations, creative developments, desire for exploration and discovery of new knowledge, and so forth.

Mastery of subject matter as evinced through comparative scores on objective paper and pencil tests constitutes, at best, only one small dimension of the educative process. Can the student apply his learnings to life situations? Is he able to gather and weigh evidence objectively, make relevant assumptions and hypotheses, and draw valid conclusions

⁵ See *Experimental Study in Instructional Procedures, Progress Report* (Oxford, Ohio, Miami University, 1956), 48 pp.

in solving important problems? What motivational forces catalyzed through the teaching-learning process are manifested in later years, as the individual fulfills his role as a responsible citizen in a free society? What cultural interests and appreciations does he tend to develop after the formal educative process is completed? While these and many other questions are much more difficult to assay than subject-matter retention, further experimental work should throw some needed light on various modes and media of instruction.

In view of the limited experimental findings to date, along with the tentative nature of these findings, it would seem reasonable to refrain from becoming overly optimistic about the sweeping possibilities of television as a device to absorb 100,000 teaching positions in our elementary and secondary schools alone, not to mention our colleges and universities. Furthermore, the judicious observer is compelled to raise many other serious questions regarding the technical aspects of the experimental designs in comparing television with conventional classroom teaching procedures. The careful researcher knows that in an experiment, insofar as possible, there must be no disparity of uncontrolled variable factors between the experimental and control groups. Scientists have known for some time that the psychological benefits from being cognizant of one's membership in an experimental group can be sufficiently significant to invalidate the entire experiment. Homans emphasizes that workers in factory experiments have explained their increased rate of productivity in the test room—without any conscious effort on their part—on the grounds that "it was fun to work in the test room." To these workers, it even seemed easier to produce at the faster

rate in the test room than at the slower rate in the regular department. As Homans points out, the awareness of participating in an important experiment constitutes, in itself, a significant variable in the research:

The operators knew that they were taking part in what was considered an important and interesting experiment. They knew that their work was expected to produce results—they were not sure what results—which would lead to the improvement of the working conditions of their fellow employees. They knew that the eyes of the company were upon them.⁶

To a far greater extent than in the factory studies, the participants in the television experiments are aware that the spotlight is shining upon them. They are the focus of an experiment which is important, interesting, and dramatic. During the course of these studies, the participants soon find numerous illustrated magazine and newspaper articles concerning this experimentation with television as a medium of instruction. It would be reasonable to assume that this factor could alter significantly the results of the experiment by acting as a stimulus for the experimental or television group. The control group, on the other hand, do not experience the glamor, excitement, and attention which the experimental group enjoy. One method of counteracting this added stimulus would be to involve the experimental group in a sustained, long-range program whereby television as a medium of instruction becomes relatively commonplace to the participants. After from two to four years of course work entirely via the television medium, more accurate results could be secured.

⁶ George Caspar Homans, "Group Factors in Worker Productivity," *Readings in Social Psychology* (New York, Henry Holt and Company, 1952), p. 640.

It should be emphasized that negative student attitudes toward television as a medium of instruction cannot be assumed to counteract the stimulus of membership in an important and highly publicized experimental group. A long-range experiment, however, would tend to buffer the psychological effects of the experimental stimulus. Unfortunately, the experimental work to date has been confined to a semester or an academic year only. Moreover, the members of the experimental groups simultaneously continue to pursue the major portion of their studies under conventional classroom conditions. In other words, these students are involved in the experiment only during a fraction of their day-to-day academic programs.

Another possible disparate variable worthy of mention is the effect of television on the teacher. The Miami University studies reveal that instructors utilizing television reported that this medium caused them to improve the quality of both their presentations and their organization of course content.⁷ Although both the experimental and the control sections of each course are taught by the same instructor, it would seem reasonable to assume that the instructor is stimulated to a greater extent by the television medium than in the conventional classroom or control situation. Such stimulation might tend to be counterbalanced as this medium loses its experimental novelty. The added stimulation reported by instructors as causing them to improve their teaching organization and presentation for the medium of television may constitute an additional variable in favor of the experimental or television group.

⁷ *Experimental Study in Instructional Procedures*, p. 23.

It is the contention of the writer that the tenability of these experimental findings is subject to question in view of the research designs. There appear to exist a number of disparate elements, other than the experimental factor, between the experimental and control groups. In these television experiments it is, of course, exceedingly difficult to ascertain the degree of uniformity of nonexperimental factors between the parallel groups (control and experimental). Nevertheless, such disparity can invalidate these studies by leaving us lacking in knowledge as to what can be controlled and gauged. Consequently, before we can jump to any far-reaching conclusions regarding the values of television as an instructional medium, further experimentation with adequate controls over salient nonexperimental factors is essential.

On the basis of the tentative and inconclusive findings from short-duration experiments with television as a medium of instruction, we must not allow ourselves to fall prey to hasty assumptions and conclusions. Before any blueprint for television in the schools of tomorrow can be developed, we must first know all the dimensions of this new medium of instruction. Although Dr. Stoddard emphasizes that "our profession must welcome, not resist, changes that may improve the quality and increase the quantity of education," we must guard ourselves against easy and superficial solutions. We cannot, as one leading industrial executive has advocated, conceive of education as being in competition with entertainment and commercial sponsorship. Even though education may be made most pleasurable and rewarding, it may never come to us along the path of least resistance. For, if we allow education to be diluted, homogenized, abased, and tran-

quilized, we may well be in danger of losing much that we have gained as a free people.

When one advocates the improvement of the means of communication, one must also be concerned with the purposes and goals for such communication.

We have emphasized that television experiments to date have been largely involved with a single dimension of learning, namely the acquisition of subject matter. Our society must continually strive to improve our goals as well as our gadgets.

New Directions in Teacher Education Appraised*

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PAUL WOODRING'S *New Directions in Teacher Education* may be fairly described as an official account and defense of the work of the Fund for the Advancement of Education in the fields of teacher education and recruitment. Indeed its subtitle declares that it is an Interim Report of the Work of the Fund. That it is a defense will appear shortly. Dr. Woodring, we are told, was employed to conduct "a critical review," but he appears to have found little to criticize. That what he has written often reads like an advocate's brief is, however, no cause for complaint. The Fund's policies have been subjected to rather vigorous criticism, and its officers have been known to aver that they were the victims of misunderstanding. It is good for all concerned to have this detailed and authorized statement.

In his Foreword, Dr. Alvin C. Eurich, Fund vice-president, reports that since the organization was established by the Ford Foundation in 1951, it "has regarded teacher education as its most important area of concern," devoting more money to it than to all other interests put together. The total investment, over six

years, is said to have been roughly \$24,000,000. However, only a third of this amount is accounted for by the grants made to the twenty-five individual teacher-education programs reported on by Woodring.

Four categories of such programs are distinguished. By examining them a good idea can be obtained of what the Fund has considered "bold," "imaginative," and "new" enough—the adjectives are recurrently employed—to command subsidization.

More than five-eighths of the \$8,000,000 accounted for has been invested in professional fifth-year programs for liberal arts graduates. More than \$3,000,000 has gone to the archetype of these, that involving the University of Arkansas and fourteen cooperating colleges. The essence of these programs—others have been located at Temple, Cornell, Louisville, Goucher, Harvard, and, more recently, Bank Street, Johns Hopkins, and Yeshiva—has been fivefold: (1) those served have been liberal arts graduates without prior professional training; (2) the fifth year has included extensive classroom experience, usually through appointment to status as an apprentice or intern; (3) professional education, deemed essential, has been closely related to practical experience; (4) no general

* *New Directions in Teacher Education*, by Paul Woodring (New York, The Fund for the Advancement of Education, 1957), x + 142 pp. Free.

or advanced academic education is included during the fifth year; (5) scholarships amounting to as much as \$2,450 have been provided, with a varying successful effort to shift in the direction of internship salaries paid by local school districts.

No professional educator will be surprised to learn that the close integration of theory and practice has proved generally satisfying, but that there have been difficulties in actually dovetailing the two, and in providing adequate supervision. Even with generous financial aid the recruiting of men—or, indeed, of either sex—for preparation for teaching in the elementary schools has been difficult. Arkansas has now abandoned its elementary program, Cornell reports it cannot continue without extended financial support, Bank Street and Goucher are cautious in their promises for the future. Harvard and Louisville seem to be shifting in the direction of encouraging some professional study at the undergraduate level. Yeshiva's program is barely under way, with \$2,000 teaching fellowships. Programs for secondary school teaching appear to be faring better. Arkansas and Temple seem to have been quite successful in developing internship opportunities, with salaries attached. Johns Hopkins, like Yeshiva, has just begun.

Fifth-year programs designed for college graduates without prior professional education are not as new, either in idea or in practice, as Woodring appears to believe. Their value in enabling promising young people who were unable or unready to begin earlier professional preparation for teaching has been generally recognized. Professional educators have, however, been skeptical of claims that postponement of all professional studies until a graduate year was a su-

perior arrangement for all prospective teachers. The outcomes of the Fund-supported projects considered above do not seem likely to convince them that they have been wrong. The advantages of supervised internships and of the close integration of professional study with professional experience they have, of course, long proclaimed. They will note with interest that Arkansas now requires, for prospective secondary teachers, a twelve-week summer session of professional work, followed by an academic year of full-time teaching under joint college-school supervision and with attendance at a weekly professional seminar, this further followed by a second summer session of professional or academic study, all crowned by a Master's degree; and that Arkansas has, as already noted, reinstalled a fully undergraduate program of preparation for elementary teachers. The impact of experience seems to have reduced the sharp-break-with-the-past elements in the Arkansas program.

Woodring's second category of Fund-supported programs includes four specializing in offering professional fifth-year education for older liberal arts graduates. To these, all in California (at Claremont, San Diego, San Francisco, and the University of Southern California), the Fund has contributed a tenth of its \$8,000,000. The programs were particularly designed to cope with a serious shortage of teachers, the chief emphasis being on the elementary schools. While varying somewhat in certain respects, all four have required a summer's attendance at college, followed by a year of internship under local supervision and with simultaneous participation in a professional seminar. Scholarship aid and/or internship salaries have been provided. Participants in the programs have been

enabled to meet certification requirements, but have not been awarded degrees. Although response to the opportunities thus provided has apparently fallen short of original expectations, a not inconsiderable number of excellent teachers are reported to have been produced by them, and two of the programs are expected to be continued.

Professional educators will have little doubt of the desirability of experimental efforts to attract mature, well-educated persons into teaching by way of properly selective and suitably designed programs of professional education. But they will believe that the chief source of new teachers must continue to be young people who have reached their vocational decisions while still undergraduates, if not, indeed, before. And they will further be apt to consider that such young people should not be denied all opportunity to take a look at their contemplated profession until after graduation from college. Although Woodring seems to be worried by teacher-education programs in which professional courses are available to undergraduates—he can scarcely mention them without warning that the liberal arts must not be allowed to be “vitiating” or “emasculated”—the Fund has supported two types thereof. These constitute Woodring’s last two categories.

The “Master of Arts in Teaching” category includes programs in which professional courses are sometimes begun in the junior year, and academic courses are always included in the post-baccalaureate experience. Such programs have been supported at Harvard (which has developed cooperative relations, in this connection, with twenty-nine liberal arts colleges), at Yale (which has suffered from recruiting difficulties but hopes for improvement now that Harvard has authorized its sister institution to hunt in

its special preserves), at Vanderbilt (originally, but no longer, jointly with Peabody), and, beginning just last fall, at Brown. A sixth or more of the \$8,000,000 has been channeled in these directions. The programs are intended chiefly for secondary teachers, and thus emphasize development of a teaching subject-matter concentration, often including academic courses newly designed to be of special value to prospective high-school instructors. While student-teaching and other direct experiences in the schools are provided, these are much less extensive than in the Arkansas type of fifth-year program. Scholarship provisions have been generous: Yale pays up to \$2,000.

The Harvard program appears to have been most successful. Yale announces that continuation is doubtful when its \$450,000 runs out, unless further subsidization can be found. The Vanderbilt-Peabody program, which never included an undergraduate element, has ended, but both institutions are continuing separate fifth-year programs—Vanderbilt, which finds it “still necessary to go outside the institution to Peabody College for some courses,” with further Fund support. Brown, whose plan also includes in-service and research activities, has barely had time to get off the ground.

Professional educators will find much in this category of programs with which they can agree enthusiastically in principle, notably the commitment to a truly integrated five-year program and the development of academic courses keyed to prospective teaching needs. Dr. Woodring considers it one of their strengths that they have been “jointly planned by faculties of education and faculties of the arts and sciences,” with resulting reconciliation of differences between these groups. Gratification at this achievement is tempered by certain indications that

the professional educators involved have done a major part of the concession-making. It may be noted, for example, that the undergraduate professional courses at Yale are in charge of professors of philosophy and psychology, not of education. But more revealing are some of Dr. Woodring's statements, which will be referred to later.

Actually a look at the final category of Fund-supported projects will also raise some doubts as to the role of professors of education. Here are grouped the "4-year [i.e., wholly undergraduate] programs combining professional with liberal education." There are only four of these, and they have not commanded much investment: only 1.5 per cent of the \$8,000,000 total, to be precise. They seem to have little in common except a determination to keep control in the hands of nonprofessionals. Swarthmore got \$15,000 "to enable . . . students to qualify at the end of four years of undergraduate work for Pennsylvania state certification without diluting the college's liberal arts program. . . . The grant was for too short a time to allow much freedom for experimentation." Carleton received \$10,800 to support "a seminar open to liberal arts professors . . . under the chairmanship of a visiting professor from a teachers college"—Dr. Woodring, as a matter of fact, though he modestly suppresses this piece of intelligence. Wilson, with \$27,870, set up "a program which demonstrates that knowledge and understanding of the liberal arts and sciences is [sic] sound preparation for professional work in education and that with a minimum of experience with elementary school situations and a thorough intensive study of basic principles of learning, a student in a liberal arts program can, with effective guidance, successfully enter work as an elementary school

teacher upon completion of a four-year college course." Barnard is spending \$67,500 on a colloquium which, while "not a complete program of teacher education . . . [is considered to be] a unique approach to the problem of introducing future teachers to a wide variety of points of view in education." (Of the six "outstanding figures" whom Woodring selects to name as having participated in this enterprise, only one—W. H. Kilpatrick—is classifiable as a "professional educator.")

The picture, now completed, of the programs of teacher education which the Fund has found worthy of support may have suggested certain biases to the reader. In his Foreword, Dr. Eurich asserts that "the directors and officers of the Fund did not have in 1951 nor do they have today a specific program of teacher education. Rather they have been interested in supporting a wide variety of explorations, experiments, and new ideas." Woodring makes it perfectly clear, however, that the Fund has acted on certain definite convictions.

The Fund has found itself faced by two distinct traditions of teacher education in the United States, we are told. The older one "provides the basis for what may be called the academic or liberal arts view of teacher education." It "holds that *formal* education is properly centered in the world of knowledge and is concerned with the development of the mind. The newer traditions [to which the "professional educator" is in thrall] prefer to place the stress upon the 'whole child.' It [sic] places great emphasis upon the learning process and interprets this process in a way which extends it far beyond academic or intellectual learning."

Now it might innocently be supposed that some rapprochement between the partisans of these two traditions—one

stemming from the colleges of liberal arts, the other from the normal schools and teachers colleges—would be possible. Woodring's assurance that "the new programs have brought together professional educators and liberal arts faculties for the mutual discussion of the problems of teacher education and have thereby contributed to a reconciliation of the conflicts between the two groups" would incline one to believe that he would agree. Yet he declares flatly that "the two traditions represent totally different concepts of the nature of man, of the learning process, and of the proper role and limitations of free public schools." How can "totally different concepts" possibly be reconciled?

Obviously they cannot. But if the professional educators would only adopt the liberal arts tradition, then the conflicts between the two groups could as obviously be resolved. This, it is pretty clear, is what Dr. Woodring and the Fund would like to see happen. For although Woodring is courteous and unpolemical, there can be no doubt where his loyalties lie.

Let us look at a few bits of evidence. Woodring is rarely able to mention professional courses in education, of pre-Fund vintage, without recalling that they are "alleged" to be "lacking in content, subject to much duplication and [to] have proliferated unnecessarily." "Perhaps," he suggests, the solution is to have such potentially "substantial" subjects as the history of education, educational philosophy, and educational psychology taught "as a part of liberal education" by *general* historians, philosophers, and psychologists—as distinct from "professional educators." As to skills, they can best be learned through "an extended period of practice teaching." This had really best be in a fifth year lest "the time available

for liberal education . . . [be] substantially reduced." Moreover, "the public schools should play a larger part than they have in the preparation of teachers. . . . They are closer to the problems than are the schools of education. . . . It may be that, in time, much of the responsibility for the intern year [read "practice teaching" generally] will be transferred from the colleges to the public schools." All this would seem to narrow the field of legitimate usefulness of the "professional educator" quite a bit.

Woodring is, of course, delighted that the teachers colleges "are rapidly becoming general colleges . . . in which only a fraction of the students are preparing to become teachers." They increasingly hire as faculty members those "who hold Ph.D. degrees from universities and whose professional commitment is to an academic discipline rather than to education as a profession." Woodring suggests that the Fund pay more attention to assisting such institutions "in providing better liberal arts programs and in reorganizing their professional courses in such a way as to eliminate proliferation and duplication." Teachers college presidents are virtually invited to show "willingness to attack these problems vigorously," and to submit "imaginative proposals for Fund assistance."

Something should now be said regarding Dr. Woodring's two concluding chapters, and space reserved for a final personal comment.

Evaluation of educational programs, Dr. Woodring correctly states, is difficult. It is apt to depend on what the evaluator values. He himself has concluded that the Fund's \$8,000,000 to \$24,000,000 investment has: (1) "increased interest in the problems of teacher education"; (2) provided "a considerable number of teachers . . . for the public schools"; (3)

"opened up new areas for experimentation and . . . broken down some of the barriers to changes in teacher education"; and (4) "brought together professional educators and liberal arts faculties. . . ." The first three judgments are probably sound—though the magnitudes involved are certainly subject to speculation. Doubts as to the last have already been suggested. Woodring concludes that the Fund's "over-all influence" has been "impressive in its dimensions."

When Dr. Woodring takes a "look ahead," it turns out, happily, that he can foresee "the main stream of teacher education in the United States by 1965 or 1970" characterized by "some or all" of the features that the Fund has been backing: (1) "a general or liberal education which is equal in both scope and depth to that represented by a liberal arts degree from a good college"; (2) replacement of "proliferated undergraduate professional courses . . . by a maximum of two or three introductory courses in educational psychology, education [sic] philosophy, and the school as a social institution . . . [which] will not be narrowly professional and may be taught by philosophers, psychologists, or social scientists . . ."; (3) the early *requirement* in all states of "some kind of a fifth year of preparation," with paid internship a major element; (4) internship experience for all "as a member of a teaching team [Woodring is particularly enthusiastic about the teaching team concept], and as a classroom teacher in a schoolroom receiving television instruction"; (5) "special training courses, at the post-Master's degree level, . . . for experienced teachers who wish to become team leaders or television instructors"; (6) shifting of "responsibility for supervision for the intern . . . from the college to the public schools"; and (7) better selection

of "candidates for teacher training at the fifth-year level . . . than is possible when students are admitted into the program as college freshmen."

Dr. Woodring concludes his report with an identification of seven "unsolved problems" which he considers "should receive the major attention of a philanthropic organization devoted to the improvement of education and teaching." These are: (1) bridging the "deep chasm that separates the academic community from the professional educators"; (2) getting high-school and college teachers "to think of themselves as members of the same profession—even of the same team—" by providing them with similar kinds of preparation for teaching; (3) reform of state certification regulations, following "thorough going [sic] studies by committees made up of representatives of both professional and academic groups as well as representatives of the general public"; (4) re-examination of "the entire professional sequence at both undergraduate and graduate levels" in order to get rid of "duplication, proliferation, and lack of sharp definition"; (5) related reorganization of textbooks; (6) increasing the supply of "well-educated candidates for positions as instructors and professors of education, particularly for [sic; read "of"?] the kind who can work harmoniously with liberal arts faculties . . . [and who will be] qualified to teach educational philosophy effectively . . ."; and (7) programs of teacher education designed to provide teachers for the gifted. Here are useful tips for the "bold and imaginative" who would like to find a place in the Fund's golden sun.

It has seemed important to analyze Dr. Woodring's report at length, and I have made every effort to do so accurately and fairly. He, and the Fund, for which he patently speaks, deserve our thought-

ful attention. We can all agree that experimentation is desirable in teacher education, that controversy is nothing to be afraid of, and that the directors and officers of the Fund have both the right and the obligation to use their great powers as their minds and their consciences dictate. We should be grateful for so clear an exposition of their convictions, and so explicit a forecast of the directions in which they propose to press.

I myself, one bred in the liberal arts who became, out of passionate concern, a "professional educator," am not persuaded that representatives of Dr. Woodring's "two traditions" can get together only through virtual surrender by one

party. I do not agree that the existing conflicts of opinion are rooted in irreconcilable philosophical differences: I believe they are, rather, fundamentally consequent upon differing angles of vision which might both be broadened by closer joint attention to the reality of children and school situations. I have myself seen such broadening occur.

I do not anticipate that anyone is going to be forced to surrender. Indeed, I hope we may all resist temptations to assume a belligerent posture. It would be a pity if we should become defensive rather than strive to respect, understand, and learn from one another.



REVIEWS

Colleges for Our Land and Time, The Land-Grant Idea in American Education, by Edward Danforth Eddy, Jr. New York, Harper and Brothers, 1956. xiv + 328 pp.

Mr. Eddy's *Colleges for Our Land and Time*, a sort of Horatio Alger story of the land-grant colleges, is loaded with fact. If one wishes to know the number of home demonstration agents employed in 1936, the number of books in selected land-grant college libraries in 1876, the date at which certain subjects entered the college curriculum, the 1948 budget for the Alaskan extension service, the number of students who, in 1870, contributed manual labor to Iowa State's farm, or any of several thousand additional facts, this book has the answers. For this reason alone, the student of the history of higher education in America can perhaps ill afford to ignore Mr. Eddy's book; and those who share the author's great enthusiasm for agricultural, home economics, engineering, and extension education will certainly not want to miss it.

Mr. Eddy has written a success story pure and simple. He carries us through the early efforts to establish the colleges (1863-1879), the shaping of the land-grant idea (1880-1899), the acquisition of form and substance (1900-1914), the response to crisis (1915-1937), and the period of rich maturity (1938-1956).

A final chapter on philosophy and conclusions, and a liberal sprinkling of personal responses and interpretation throughout the book, make it clear that Mr. Eddy is aware of some present shortcomings and future problems for the land-grant colleges. He notes, for example, the difficulty of providing both the immediate practical results

needed to insure public support and, at the same time, opportunities for pure research. He is aware that the "people's college" can easily become a political arena in which the efforts of special interest groups run rampant. But we are left with a feeling of reassurance: the land-grant movement will not fail.

Unfortunately the author's enthusiasm leads him to distort seriously the picture of nineteenth and twentieth century educational reform. In this period educators at all levels and in all sorts of institutions discovered the language of the New Education. Many were affirming, and some were practicing, the principles that the "power of observation" rather than "rote memory" should be encouraged, that reasoned conclusions should replace blindly accepted faiths, that studies having intrinsic appeal to the students were more valuable than those perceived as "long since dead," and that the individual student rather than subject matter alone should be central in the teacher's thought. Among these educators were many in the land-grant movement. But to give the impression, as Mr. Eddy does, that these reforms were *primarily* an outgrowth of the land-grant movement is to distort.

In the same period agrarian reformers were operating in several areas—the U. S. Department of Agriculture, the farmers' press and organizations, and the common schools—to develop farm-youth movements. Important *among* these reformers were professors and administrators in the land-grant colleges. But while Mr. Eddy does not actually say that farm-youth movements are a blessing growing directly out of the land-grant colleges, one must read very carefully to escape this impression.

Officials in many colleges, private and

public, shared in the development of scientific education, coeducation, and the elective system. Mr. Eddy notes this as a matter of fact, but somehow he leads us to believe that only the land-grant colleges took these ventures seriously. Thus, "it remained for the land-grant colleges to give genuine acceptance to the notion (of coeducation)"; and the "scientific school" becomes synonymous with "land-grant college." In this last case Eddy even adds a parenthetical definition to a quotation by Noah Porter referring to the scientific schools (p. 72). Actually Porter did refer to the new land-grant colleges as scientific schools, but the precise examples cited by Porter just before the quotation which Eddy edited were taken from private colleges—Yale, Harvard, and Brown. Incidentally, the same kind of exaggeration appears in Eddy's treatment of the elective system.

A further example of mistaken emphasis appears in Eddy's handling of the state university movement. This movement as a whole involved an attempt to make higher education more widely available and more responsive to public interests. The land-grant colleges should not be confused with the whole movement of which they were but a part.

One might also raise a question about the older liberal arts colleges which do not fare well in Mr. Eddy's hands. Here he follows the lead of Carl Becker and Andrew D. White. Holding true to his success story motif, Eddy paints a very dismal picture of the nineteenth century college so that the land-grant college which he loves can shine more brightly by contrast. No doubt the old college, partly a grammar school devoted to drill and partly a platform from which the college president exhorted his students to cling to virtue, had its faults. Even the most extreme liberal arts purists among us would not actually want to return to it. But was it really as bad as Mr. Eddy implies?

I doubt that Horace Mann, who described his many stimulating evenings in the home of President Messer of Brown, or the students who accompanied tutors Leverett

and Brattle of Harvard on a visit to New York would be much impressed by Mr. Eddy's judgment that the importance of close teacher-student relationships was realized only in the land-grant colleges as an outgrowth of their accepting the elective system (p. 61).

In sum, what is lacking here is perspective. In spite of his sections on general cultural history, Mr. Eddy fails to have us see the land-grant movement in the context of a widespread reform of American higher education or to recognize the relationship of this reform to an even more general modification of educational beliefs and practices. Seen in this larger context, the land-grant movement assumes its proper and important place.

If Mr. Eddy's enthusiasm sometimes leads to false emphases, it remains true that the land-grant movement is one of the great and unique experiments in the history of higher education. It has become a valuable instrument by which the American people have sought to express and achieve their educational and other social aspirations. Its story, which clearly deserves to be told, was begun by Earle D. Ross, whose *Democracy's College* is extensively cited by Mr. Eddy. It is well that the story has been brought up to date by one with such obvious love for his subject and such industry in ferreting out facts.

MERLE L. BORROWMAN
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The Christian Idea of Education, Papers and Discussions from a Seminar at Kent School, edited by Edmund Fuller. New Haven, Yale University Press, 1957. 265 pp.

In the fall of 1955 a seminar on the Christian Idea of Education was held at Kent School in connection with the commemoration of the school's fiftieth anniversary. The book under review contains the formal papers presented on that occasion by eight

distinguished Christian thinkers, together with selected excerpts from the informal discussions of these papers in ensuing small group meetings, and with an appended address on the same theme given on another occasion.

All of the prepared papers are of high quality and worthy of careful study, faithfully reflecting the brilliance and confirming the eminence of the men who authored them. As might be expected, the transcribed discussions are of less value, but they do add an occasional note of spontaneity and freshness and lend some feeling for the dialectic of ideas that animated the seminar.

Apart from an occasional bewildered or feebly dissenting voice in the discussions, the book clearly represents a conversation among the faithful. It is not a manifesto or an apology directed toward a secular world, though the challenge of secularism is evident on every page. It is a series of confessions or declarations by fully committed Christians regarding the meaning of their faith for the enterprise of education. Although most of what is said applies to education within the Christian community, and hence in private schools and colleges, many of the ideas also have considerable significance for public education.

William G. Pollard, nuclear physicist and a priest of the Episcopal Church, presents the thesis that Western culture has two radically different sources, the Graeco-Roman and the Judaeo-Christian, and that the modern Dark Age has resulted from absorption in the former to the neglect of the latter. He believes that the most fruitful category for the Christian idea of education is that of *renaissance*, and that the crucial need is to regain the capacity to respond to the Judaeo-Christian, that is, the Biblical, outlook on life. This renaissance will not be effected by institutional or curricular changes but by the influence of individual teachers who have rediscovered the power of the Christian Gospel.

E. Harris Harbison, a Protestant historian, asks whether a liberal education can be Christian and whether a Christian edu-

cation can be liberal. Reinforcing his argument by perceptive historical commentary on the Christian Humanism of men such as Vittorino, Erasmus, and Comenius, he concludes that a liberal education can be, and often has been, *illuminated* by Christian faith, but only on the condition that the Christian education is liberal, as it assuredly can be.

Alan Paton, of *Cry, the Beloved Country* renown, writes in exquisite prose about education as the growth of persons in community. He sees the problem of education as that of reconciling freedom and order, and the solution as the acceptance of responsibility for others in the spirit of love.

Church historian Massey H. Shepherd, Jr., endeavors to show the place which the liturgy holds as the integrating factor within the Christian concept of education. Christianity is supremely a life of communal devotion, the highest form of which is the holy Eucharist. Christian worship fulfills the objectives of education by fostering wholeness, creative activity, and opportunity for endless growth.

John Courtney Murray, a Jesuit theologian, takes as his model the third century Christian School of Alexandria founded by Origen and uses this first full-scale encounter of Christianity with the intellectual world of ancient times as a paradigm of the true path of Christian education. All truths are part of one Truth, just as there is one fountain of truth, God. The task of Christian education is to relate natural and revealed knowledge in one universe of intellectual order.

Roman Catholic philosopher Jacques Maritain begins with a statement about the Christian view of man as an organic whole, natural and supernatural, fallen in sin and needing redemption. He argues for an enlarged view of liberal education as including knowledge of the sciences and technology as well as the classical humanistic disciplines. Religion should be integrated into the whole life of the student through philosophy, liturgical activity, and self-organized teams of students concerned with

the moral and political affairs of the educational community. He concludes with a novel vision of college education for all as organized around two opposite centers, one for manual service training and the other for intellectual service training, each with its own institutes of properly oriented humanities.

Georges Florovsky, a theologian of Eastern Orthodox faith, deals with the relation of Christian faith and culture. He shows in historical perspective how the Christian community has either opposed the world's culture or attempted to transform it into a Christian culture. The function of Christian education is to prepare Christians for eternal life, but always within the context of the needs and problems of the concrete historical situation.

Reinhold Niebuhr, America's best-known Protestant theologian, returns to the theme with which the book began, namely, the two sources of Western culture. The Hellenic emphasizes rational order and coherence, the Hebraic emphasizes personal freedom and transcendence, responsibility and sin, forgiveness and reconciliation. Scientific advances, the ambiguity of traditional religious symbols, and the essentially religious quality of much ostensible irreligion are some of the causes for the modern dominance of the Greek over the Hebraic-Christian outlook. But today we are witnessing the demise of confident secularism. While no explicit application is made to education, the inference is that the Christian educator possesses resources within his faith by which modern man may be delivered from rationalistic illusions and autonomous pretensions.

In his concluding chapter Episcopal Bishop Stephen F. Bayne, Jr., urges that ultimately *God* is the teacher, and that good teaching is concerned with truth, wholeness, excellence, discrimination, and commitment.

Here indeed is a first-class collection of essays, representing the best thought of dedicated Christian scholars on the fundamental issues in the relation of their faith

to education. The book is a significant contribution to the ages-long dialogue between the voices of faith and reason, cult and culture, grace and nurture.

PHILIP H. PHENIX

Teachers College, Columbia

Helping Parents Understand Their Child's School, by Grace Langdon and Irving W. Stout. Englewood Cliffs, New Jersey, Prentice-Hall, 1957, xviii + 508 pp. \$5.00.

In these days of numerous criticisms of public education, criticisms directed at both what is taught and how it is taught, any book seeking greater public understanding of the public school is a timely addition to educational literature. When such a book is written by people with the breadth of experience and depth of understanding of Grace Langdon and Irving Stout, and is based upon valid research, it becomes not only timely but significant.

The study around which the book is organized and which determined in large measure its content involved individual interviews of considerable length with the parents in 865 families residing in eight different states. Among those interviewed were families of widely different social-economic status, varied occupations, divergent educational levels, and a considerable range in number of offspring. In response to the question, "What would you like to know about your child's school?" came invariably the answer "We want to know what is being taught, why it is being taught, and how it is being taught. We wish they would tell us." As a result of this study, the book, in the words of the authors, "Is very different from the way it would have been had we relied on experience alone in writing it."

Helping Parents Understand Their Child's School is based on a dual premise: that it is important for parents to know about their child's life in school; that the teacher of the

child is the person best qualified, through day-by-day experience, to tell them about it. The research study supports the first premise and gives it concrete form by revealing what it is that parents want to know. In Chapter 1 the authors build a strong case for the second premise and give teachers concrete help in carrying out this responsibility.

Chapters 2 through 15 deal with all the areas of the curriculum as well as extracurricular activities. The first of these chapters is concerned with the curriculum in general, developing an understanding of the meaning of the term, a picture of the general structure of the curriculum, and the concept that the learning experiences provided by the school must change with the changing times in which youngsters live. Succeeding chapters deal with the language arts, including reading on the various levels, phonics, handwriting, spelling, listening, speaking and writing; arithmetic; science; social studies; the creative arts; vocational education; physical education; extracurricular and social activities. Many questions are raised, and the teacher is given very real help in answering them. Frequently they relate to criticisms commonly leveled at the public schools. Among them are such questions as, Why have methods changed since we were in school? How are beginners taught? Is there any drill? What is the content of this field? How do you deal with individual differences? What is done about children with special difficulties? Why is manuscript taught to beginners? What about phonics? Why can't youngsters spell?

In Chapters 16 through 19 attention is focused on questions relating to method and technique, discipline, homework, grades, report cards, and promotion and failure. These are areas under almost continuous study by curriculum groups in local school systems across the country. They are troublesome areas for teachers. Apparently parents are equally concerned. Their questions, as in other sections of the book, are basic and penetrating. The authors deal with them specifically and honestly.

The remaining chapters in the book are concerned with school services and the over-all school setup. They deal with transportation, guidance, lunch program, health, and exceptional children, and with such general problems as school organization, building and equipment, costs, and basic beliefs and policies. Here, too, the questions reveal deep parent interest and concern; here, too, the authors deal with the questions in a forthright manner.

Helping Parents Understand Their Child's School is said to be a handbook for teachers which "helps teachers anticipate, as well as answer, the questions parents will ask about their children's school." Through the parent interviews, teachers are given real help in anticipating the kinds of questions parents will ask about all facets of the school program. The authors, through their experience in teaching at all grade levels and in working with teachers, are able to give concrete assistance in answering these questions. The organization of this book, with its excellent Table of Contents and its Summarizing Suggestions and Additional Comments at the close of each chapter, makes it easy to use. Its style makes for interesting reading. It should be extremely useful in working with individual teachers and with groups of teachers. It would have a place in working particularly with teachers new to a system. It is intriguing to contemplate its use with a combined lay-faculty study group.

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Department of Elementary School Principals, *Parents and the Schools*, Thirty-sixth Yearbook. National Education Association, Washington, D. C., September 1957, viii + 310 pp.

Among most of today's educators there is agreement with the proposition that there should be cooperative working relationships between school personnel and parents.

Many parents voice such a sentiment in no uncertain terms. Yet it was not always so. William G. Carr, in his delightful introductory article of the book here reviewed, makes a relevant comment in this respect. Recalling the school-system organization charts learned by administration students earlier in this century, he observes that the pupils were invariably to be found "clinging precariously to the bottom edge of the chart."

"These children," he goes on to say, "were the treasured offspring of some of the citizens represented at the upper edge of the chart, but I do not remember that we ever drew even a dotted line, much less a solid one, to connect these parents with their progeny."

In this yearbook of the Department of Elementary School Principals, as in other publications of the Department, the desirability of active home and school cooperation is taken for granted. It is like most other yearbooks of the Department¹ in that it is a veritable mine of "how we did it" statements, written by principals, teachers, parents, supervisors, and directors or coordinators of instruction, and a few other authors, including state department personnel, professors, a research worker, and a superintendent or two. Their descriptive statements are organized under fourteen chapter titles, each focusing on a specific aspect of parent-school relationships.

It is greatly to the credit of the authors and editors that no easy, black-and-white generalizations are stated. The reader who seeks to find responsibilities neatly (but unrealistically) allocated to parents, teachers, and principals will, we are glad to say, be disappointed. On the other hand, there are many reports here for the person thoughtfully seeking suggestions for problems upon which teachers and parents can work co-operatively, techniques of dealing with conflicts between teacher and parent, means of

keeping parents informed about a changing school program, the role of the principal in parent-school relations, or the function of citizen advisory committees.

There are articles on legal aspects of parent participation; on dealing with religious differences in the community; on ways parents can help in school clinics, libraries, and other school endeavors; on instances of co-operative teacher-parent planning; on workshops and handbooks for parents; on parent-teacher conferences about pupils' progress; and on issues and objectives in parent participation in school activities.

As in previous yearbooks of the Department, the method of compiling the yearbook has prevented its having continuity or strong cohesiveness. Actually it is not a book; it is a symposium, a collection of illuminating, informative articles of a highly practical nature. Inevitably there are gaps and duplications. Furthermore, there is nothing that is new, nor (I suspect) was there intended to be anything new.

The chief value of this publication lies in its many practical illustrations of ways in which dedicated school workers the country over are putting sound public relations theory into practice. The keynote throughout is *parent participation* in school planning and activities, with evidence that it can work and work well. It is an effective rejoinder to those skeptics in education who claim that such participation is not practicable. Some of us will contend with Stern's assertion in Chapter 14 that, "The effectiveness of any school program depends upon the degree to which it reflects interaction between the parents of the community and the school." A school's effectiveness depends on more than that. Nevertheless, this yearbook is a testament to the fact that such interaction can strongly enhance a school's effectiveness. It should be a useful reference for school personnel, and a helpful supplementary reference in the study of school administration and school-community relations.

¹ For example, the twenty-fourth Yearbook, *Community Living in the Elementary School* (1945), and the twenty-eighth Yearbook, *The Public and the Elementary School* (1949).

HAROLD J. McNALLY
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The Child in the Educative Process, by Daniel A. Prescott. New York, McGraw-Hill Book Company, Inc., 1957. xiii + 502 pp. \$6.50.

In *The Child in the Educative Process* Daniel Prescott reports on sixteen years of continuous experimentation with ways of helping teachers to achieve an adequate understanding of the individual children they teach. But the book is much more than a report on a project. It describes education as a process directed toward social responsibility and self-actualization. It sets forth a method, basically scientific, for studying children. It elaborates the framework of human development principles against which the teacher organizes her information about each child. It even looks to the future, suggesting how the methods of scientific child study can modify and improve education.

Beyond this, by including case studies made by teachers, the book reveals many facets of today's schooling. Through the teachers' anecdotes we see the children and the complexity of factors which enhance or hamper their learning. Equally vivid are the teachers themselves, their values, their concerns, and their biases. Very often the content of the schools' curriculum is painfully apparent. Occasionally it is rich and vital; sometimes it is thin, repetitious, and lacking in clear direction.

Any book which attempts, deliberately or otherwise, to cover as much ground as *The Child in the Educative Process* runs certain risks. Some readers will be irritated by innumerable lists of "factors," "characteristics," "types of information," and "steps to be taken." Others will react against the extensiveness of the case study material. Still others will wish for fuller references to the research which supports some of the conclusions.

In his preface Prescott says that this is not a book of final answers. Rather it is intended to stimulate further action. Certainly those who work to improve teaching stand to benefit by the tentative answers at which Prescott has arrived. Teachers can gather

information about children, they can organize it, they can learn to make hypotheses about behavior causation and withhold judgments while they collect evidence, they can modify their treatment of children in line with their understanding of them, and children benefit in certain ways from such modification. But such answers raise further questions.

Implicit in many of the case studies and in the "framework for analyzing a human being" is the notion that many adjustment processes occur below the level of consciousness. Yet the unconscious aspects of the personality are rarely made explicit. The teachers are not to regard themselves as therapists but only as "facilitators of healthy growth." Is this role better fulfilled when teachers view the unconscious as a murky never-never land or when they are helped to see its workings more specifically? This is a question which plagues all who would help teachers understand children.

Somewhat related are questions regarding the teacher's own personality, her insight and understanding not only of the children but of herself. How scientifically can evidence be weighed if direct attention is not given the bias of the observer? Can teachers delve as deeply into the joys, fears, hatreds and sorrows of children as these teachers did without facing similar concerns in themselves? What kinds of emotional support do teachers need when they begin to study their pupils not merely as learners but as developing selves?

So far as the children themselves are concerned the report implies that the mental health of the children improves as their teachers learn to know them better. But can these judgments of the teachers and even of the psychological consultants be validated scientifically? On all these questions Prescott's report provides many clues but few answers.

Finally, some readers may well question the whole focus of this report. They may grant the importance of each child's uniqueness but wonder whether the teacher might not more properly emphasize the creation

of a classroom situation conducive to learning, rather than the understanding of each child. The dilemma, as Prescott indicates, is that the same learning situation has such different meanings to different children. Nevertheless, if the teacher's anecdotes present a sample of today's classrooms, improvement in the educative process also demands continuing attention to what the teacher does as she presents material, demonstrates procedures, asks questions, and in other ways guides classroom learning.

MILLIE ALMY

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The Teacher's Role in American Society, Fourteenth Yearbook of the John Dewey Society, edited by Lindley J. Stiles. New York, Harper and Brothers, 1957. xx + 298 pp. \$4.00.

What are the social origins of the teaching profession? How do these origins affect the work of the teachers? What is the social and economic status of teachers? What have been the gains and what are the prospects for education as a profession? These and other important questions are discussed in *The Teacher's Role in American Society* by an impressive group of educators. However, the uneven quality of the contributions makes it difficult to generalize about the yearbook, especially in a way that is fair to the individual authors. Inasmuch as there are twenty chapters, most of them by different authors, it is not feasible to review each separate contribution. Therefore, I shall discuss briefly a few points under each of the four main sections of the book.

The first section, entitled "The Situation of the Teacher in American Society," deals chiefly with the social class origins of teachers. Most of the factual material accords with previous studies of the subject. However, in discussing conflicts between teachers which are said to be causally related to their social origins, the authors write: "On a national scale, with the exception of the South, the most significant division related

to these situations is that between the locals of the American Federation of Teachers and the affiliates of the National Education Association." This statement in context vaguely suggests that teachers join the AFT or the NEA according to their social origins. I am not sure how the writers would explain the thousands of teachers who belong to both organizations or the even larger number who have the same social origins as AFT or NEA members, but who belong to neither organization. Nor are the implications for the intelligence of teachers particularly flattering, since it appears that their choice of teachers' organizations is made with their glands instead of with their brains.

Another line of reasoning favors the employment of teachers on a racial or religious basis to generate community support for school budgets. The recommendation is not put so crudely, but no one can doubt it: "Shrewd administrators are already aware of the advantage of having teachers who are natural contacts with the many subgroups which compose the average American community. In these days when skyrocketing school enrollments force educators to 'go to the public' again and again for bond issues, special tax levies, and higher budgets, both superintendents and teachers' organizations are fully aware of the need to 'line up' as many groups as possible behind the schools. In such situations, teachers who 'speak the language' of dominant community groups or significant minorities may enlist valuable support."

It is the opinion of this reviewer that our schools suffer too much already from this point of view. Discriminatory employment policies are frequently justified by the notion that it is desirable to have teachers whose backgrounds are similar to those of the communities in which they teach. The notion that such teachers will understand the community better has about as much merit as that of the Southerner who "knows," because he lives in the South, that most Negroes are against integration.

In general, this section tried to say that

the social origins of teachers have certain dispositional tendencies, but that one can never infer the orientation of a teacher merely from his social origin. The resulting difficulty is that the generalizations reached are too subject to exception and qualification to be of practical value.

The second section deals with "Conflicts and Problems for the Teacher." Here we read that "The person who is identified as the 'good' teacher may or may not actually be able to teach. Administrators, guided by community opinion, may tend to select teachers on the basis of factors that have no demonstrable relationship to effective classroom instruction." Such administrators may have been taking the advice of the authors in Part I, who recommended the employment of teachers who could help build community support for school budgets.

In analyzing the status of the teacher as a citizen, this section effectively documents the political ineptitude of the teaching profession. It also criticizes a number of fallacies which inhibit teachers from becoming more active politically. For example, it suggests that the teacher's lack of political activity "does not guarantee objectivity and participation does not necessarily mean teaching bias." Actually, as this section points out, politically active teachers are as objective in class as teachers who are not active politically, perhaps even more so.

Part of this section is devoted to the economic status of teachers and the extent of their participation in community activities. Although excellent in its realistic portrayal of the inferior status of teachers, its concern that the teacher should participate more in community activities is open to question. The authors themselves note that doctors, who enjoy the highest prestige of all professions, have very little time for nonmedi-

cal work. Nevertheless, they ask that teachers be accepted and paid as professionals in practically the same breath that they ask teachers to place more emphasis upon their community (that is, nonprofessional) activities.

The last section, devoted to "The Profession of the Teacher," includes some incisive analyses which are in sharp opposition to positions taken earlier in the yearbook. For example, this section effectively questions the value of questionnaires to elicit from teachers the reasons why they selected teaching as an occupation. Nevertheless, some previous sections were based upon the results of such questionnaires. An excellent brief summary of the career patterns of teachers was marred slightly for this reviewer by a confession of inability to locate data on the extra-contractual income of teachers. Research on the subject is scarce, but this reviewer knows of at least two dissertations in this field. The final chapter includes a number of thought-provoking suggestions to strengthen the teaching profession; the analysis of the certification muddle and the discussion of the steps needed to straighten it out are especially good.

Despite its many virtues, the yearbook can be justly criticized for overlooking certain factors which are extremely important to the status of an occupational group. Thus there is no analysis of the reasons for the ineffectiveness of teachers' organizations. Another remarkable omission is the absence of any discussion concerning control of entry and expulsion by teachers. Omissions such as these, in a yearbook written by a number of our best-known educational leaders, are an important clue to the current deprofessionalization of education.

MYRON LIEBERMAN
Yeshiva University

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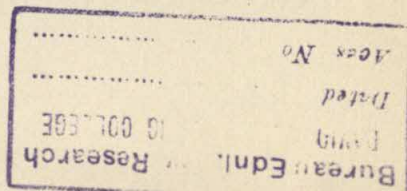
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TEACHERS COLLEGE RECORD

Current Proposals for Federal Promotion and Support of Education in the States*

JOHN K. NORTON

PROFESSOR OF EDUCATION, TEACHERS COLLEGE

FEDERAL legislation for the promotion and financial support of education began early in the history of the United States. It has taken a variety of forms.

At one extreme are fundamental measures based on broad conceptions as to the relation of education to the well-being and progress of the nation. These laws have made substantial and perma-

* Dr. Norton has been professor of education since 1930 and head of the Department of Educational Administration at Teachers College, Columbia, since 1942. He will retire from these positions on June 30, 1958. For nearly forty years he has been a student of federal relations to education. While he was chairman of the Joint Commission on the Emergency in Education of the NEA, the idea of an Educational Policies Commission was conceived and later put into effect. Dr. Norton was a member of this Commission for seven years and later served as chairman from 1948 to 1950, during which time major reports were issued on *Education of the Gifted*, *American Education and International Tensions*, and *Moral and Spiritual Values in the Public Schools*.

nent contributions to the growth of education in the states. They include a minimum of prescription. They place maximum reliance upon the wisdom and integrity of the people in the states and localities in achieving the broad purpose of these enactments. The assumption is that the people know best how the legislation can be put into effect for the benefit of the children and youth in each state. Such legislation is founded on the conception that education is a matter of national concern, that this requires national leadership and financial support, but that actual achievement of national purpose can be best accomplished through autonomous and flexible state and local administration.

At the other extreme are bits of federal legislation which merely use the Congress and the schools of the states to serve some special group or to meet some

emergency. These measures are inspired by the popular reaction to some passing but dramatic event. They are intended to be temporary, not permanent. Rather than contributing to the orderly evolution of the purpose and organization of education in the states, these laws may even distort this purpose and organization. These measures include much detailed prescription. The assumption is that the people of the states and localities lack either the wisdom or the integrity to achieve the basic purpose of the legislation. Such enactments show little conception of the nature of the national interest in education, and of the fact that this interest may be best served by maintaining a proper balance between national leadership and state control and administration of education. The virtue of this type of federal legislation lies in the belief that "it can pass Congress," not in its fundamental soundness.

The best examples of the first type of legislation for the promotion and support of education in the states were enacted early in our history and in the nineteenth century. The Founding Fathers, with rare prescience, saw the inescapable relationship between universal education and the great American Experiment. They embodied this vision in a noble statement of policy in the Ordinance of 1787. They gave this vision reality in a series of federal enactments to provide encouragement and financial support in establishing the unique American system of popular education.

In 1862 President Lincoln signed a bill providing for the establishment of a land-grant college in every state. This enactment, followed by measures creating agricultural experiment stations and extension service, is an outstanding example of fundamental educational legislation. Thus the nation assured itself that agriculture

would be carried on by intelligent citizens and skilled technicians rather than superstitious peasants. This legislation largely accounts for the remarkable, even embarrassing, productivity of agriculture in the United States.

In more recent times we have had much federal educational legislation which far from matches, either in conception of purpose or in wisdom of legislative provisions, the examples cited above. Such legislation was rife during the depression of the 1930's. One recent federal measure made the schools adjuncts to the consumption of surplus agricultural products. A year ago both enthusiasm and opposition were generated for a pitifully small federal appropriation for school-building construction. This would have added 1 cent to each 40 cents already being spent for public education. One of its alleged merits was that it could be passed. But it was not.

Just now floods of educational bills are being introduced in Congress. Apparently the chief motivation behind this enthusiasm is the sputniks and the semi-hysteria which they have aroused. Suddenly a lot of people have realized that education is essential to national security. What is the character of the legislation which, during the first month of the current 85th Congress, Second Session, has been proposed in response to this realization? Let us analyze the more important measures.

THE BILL OF THE PRESENT ADMINISTRATION

The proposal of the Republican Administration in Washington in S. 3163 and H.R. 10,278 is an emergency four-year measure to meet "critical national needs." Title I of this Bill seeks to prevent the waste of student talent by encouraging the expansion and improve-

ment of state programs for: (a) the early identification of able students through improved counseling and guidance in high schools (it would require about \$16 million of federal funds in the first year and \$25 million in the fourth year); and (b) providing scholarships for college to able and needy students. This would require \$7.5 million for 1959, rising to \$30 million in 1962. It would provide 10,000 new scholarships (averaging \$750) each year, reaching a total of 40,000 in four years.

Title II would authorize federal grants to the states to strengthen science or mathematics instruction in public schools. About \$15 million a year would shore up state supervisory and teacher-training programs in science or mathematics.

An annual appropriation of \$150 million would seek to strengthen science or mathematics instruction in public secondary schools by employing additional qualified teachers and increasing their compensation, and by purchasing laboratory equipment.

Title III of the Administration Bill would authorize: (a) grants to and contracts with institutions of higher education to train teachers and supervisors of modern foreign languages for public and non-profit elementary, secondary, and higher educational institutions; (b) centers for advanced training in foreign languages to meet the needs in this regard of the Federal Government and of business, industry, and education; and (c) studies concerning needed training and methods of instruction in foreign languages. The cost of the foregoing program would be about \$1.3 million in 1959, rising to \$3.25 million in 1962.

Title IV would assist institutions of higher education in preparing more college teachers by strengthening their faculties and by providing fellowships

for potential college instructors, with no restriction as to area of preparation. The maximum federal grant to one institution would be \$125,000 per year. Estimated total cost for the first year would be \$7.8 million; \$21.6 million in the fourth year. Under a policy of "building on strength," all graduate schools would be eligible.

Title V would provide funds to assist the states in improving statistical reports on education; involving \$1 million in the first and \$2 million by the fourth year.

The total authorizations for all purposes of the Bill of the Republican Administration, including expansion of the educational activities of the National Science Foundation, would be about \$225 million for 1959 and \$1 billion over the next four years.

POLICIES AND PROCEDURES OF ADMINISTRATION BILL

State Plans. The general policy of the Bill proposed by the Administration is to require each state to submit a detailed plan showing how the federal funds will be used to achieve the particular purpose involved. These plans must be explicit on a number of points, ranging from those setting forth the state's program and methods for fulfilling the purpose of each grant, to the accounting, budgeting, and other fiscal procedures to be followed.

Special Advisory Commissions. In several instances the Administration Bill would require establishment of national advisory commissions or committees; for example, those on Federal Scholarships, on Foreign Languages, and on Graduate Education. The special agencies would exercise substantial advisory functions, and sometimes semi-administrative powers, in the development of state plans and in other respects.

Basis of Allotments. The federal allotments to the states would be on the

flat grant basis; that is, so much per pupil, student, or whatever unit of cost is involved. The state grants would not involve "equalization"; that is, taking account of differences in state tax ability. In some cases grants or contracts are to be determined by the U. S. Commissioner of Education "on such conditions as he deems appropriate to the purpose of the legislation."

Basis of Scholarship Awards. Within the limits of a state's allotment, the Commissioner would award scholarships to individuals certified to him by the State Commission. Applicants whose ability qualifies them to receive scholarships, but who are denied them "solely because of their lack of need for financial assistance to continue their education" would be awarded "appropriate certificates by the Commissioner." Those receiving scholarships also would get certificates.

Matching of Federal Funds. The Administration Bill would require that federal grants be matched by equal expenditures by the state or other educational agency receiving the grant.

Certain Other Provisions. The U. S. Commissioner of Education would be authorized to withhold funds, after a hearing, if he finds that the state or other educational agency involved has not complied with the requirements of the legislation. Appeal from such decision could be carried through the courts up to review by the Supreme Court of the United States.

The Commissioner would be authorized to make studies and carry on research bearing on the purposes of the legislation. His numerous responsibilities and duties, under federal executive organization, are to be discharged under the direction of the Secretary of Health, Education, and Welfare.

THE DEMOCRATS' BILL

Senate Bill 3187 and House Bill 10,381, which are essentially duplicates, were introduced respectively by Senator Hill and Representative Elliott, both Democrats. This extensive measure of more than 70 pages seeks to strengthen the national defense and to achieve other worthy purposes through educational means. It assumes that its projects will continue for six years.

Title I of the Hill-Elliott Bill contains declaration of policy concerning the relation of education to national security and prohibiting federal control of education in the states.

Title II would authorize 40,000 four-year undergraduate scholarships to be awarded each year for six years (making a total of 240,000) for the education of selected college students. Some 75 per cent of these would be for study of the sciences, engineering, mathematics, and foreign languages. Each scholarship would amount to \$1,000 a year for no more than four academic years. In each state a Commission on Scholarships would be set up in connection with the planning of this program.

Title III would authorize \$40 million annually for six years for loans to college students of superior capacity, selected by State Commissions, with preference to those in science, engineering, mathematics, or modern foreign languages. Loans would not exceed \$1,000 a year, at a 2 per cent interest rate. Loans would be canceled for service as a full-time teacher in an elementary, secondary, or higher education institution in a state, at the rate of 20 per cent of the amount of such loan plus interest for each complete academic year of service.

Title IV would authorize \$25 million for each of six years to enable the

Commissioner to make grants to institutions of higher education for work-study programs for undergraduate students; the employment to be related to their fields of study and to the operation of the institution.

Title V is in two parts. It would provide funds for specialized equipment, textbooks, and other materials for teaching science, mathematics, engineering, and modern foreign languages.

Part A would authorize \$40 million annually for six years to state educational agencies for this purpose. Part B would appropriate \$40 million a year for six years for similar grants to institutions of higher education.

Title VI would authorize \$75 million for each of six years to pay part of the cost to teachers for advanced study in summer sessions of institutions of higher education. This Title also would authorize \$25 million for each of six years for advanced study by teachers in extension courses. In both of the foregoing, those selected would be full-time teachers in elementary and secondary schools. Special consideration would be given to those studying in science, mathematics, and modern foreign languages.

Title VII would authorize an unspecified amount for National Defense Fellowships for the next six years for advanced study by selected university-level teachers in fields determined by the National Advisory Council on Science and Education. (A later Title deals with the creation of this Council.)

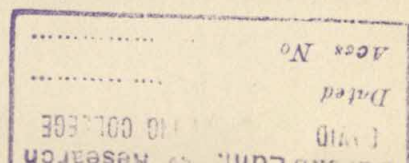
In addition this Council is to assist the Commissioner in the preparation of regulations for this Title and is to establish panels of persons, expert in the fields in which fellowships are being awarded, to advise the Commissioner with respect to the selection of persons to receive such fellowships.

Stipends under this Title begin at \$2,000 for the first year of academic study and rise to \$2,400 for the third year. In addition to the foregoing amounts, those awarded fellowships would be paid up to \$1,000 a year of the actual certified cost to such institutions of providing the program of studies or research for which such fellowships are awarded. Under this Title, and also under Title VI, the stipends are increased a specified amount for each dependent of those awarded fellowships.

Title VIII would provide for guidance and counseling. Part A would authorize \$15 million a year for grants to state educational agencies to assist them in maintaining programs of guidance and counseling in secondary schools. Part B would appropriate \$6 million annually for the purpose of establishing, in institutions of higher education, summer session courses in counseling and guidance of high school students. These institutions would receive payment of cost incurred. Teachers in public school systems enrolled in such courses would receive stipends at the rate of \$75 per week. Part A operates under state plans approved by the Commissioner. Under Part B, the Commissioner contracts with institutions of higher learning.

Title IX of the Hill-Elliott Bill would authorize \$10 million a year for grants to state educational agencies to employ consultants who would establish programs to improve the qualifications of high school teachers in the fields of science, mathematics, and modern foreign languages.

Title X would establish in the Office of Education an Institute for Research and Experimentation in New Educational Media—television, radio, motion pictures, and related media. It would set up an Advisory Council on New Educa-



tional Media to approve grants-in-aid and contracts made by the U. S. Commissioner. It would also authorize purchase of audio-visual materials for use in elementary, secondary, and higher educational institutions. A beginning annual appropriation of \$5 million, and \$10 million for each of four succeeding years would be made for the foregoing purposes.

Title XI would award a "Congressional citation for outstanding scholastic achievement," with medal and scroll, to high school students of each state who rank scholastically in the highest 5 per cent of their graduating class.

Title XII would assist the states in providing needed vocational education of less than college grade in occupations essential to national defense. This would add an appropriation of \$20 million to the original Vocational Education Act of 1946.

Title XIII would provide for a number of routine regulations concerned with the administration of the Act. It would also establish a National Advisory Council on Science and Education, consisting of the U. S. Commissioner of Education as chairman, the Director of the National Science Foundation, and twelve members appointed by the President with the consent of the Senate. This Council would assist and advise the Commissioner on matters of basic policy in the administration of this Act.

The Hill Bill as opposed to the Elliott Bill contains a Title dealing with a Science Information Service. This would be established by the National Science Foundation to provide for indexing, abstracting, translating, and disseminating scientific information, including the development of mechanized methods by which such information can be made available.

POLICIES AND PROCEDURES OF HILL-ELLIOTT BILL

The Hill-Elliott Bill is considerably broader in scope than the Administration measure. It would authorize substantially larger appropriations, generally for six rather than for four years. It is less prescriptive at certain points. It is similar at a number of points in general policy and administrative procedure.

One notable exception is that the Democratic Bill contains a section prohibiting federal control of education, which is omitted in the Republican Bill. This section has been included in a number of federal educational measures in recent years:

Nothing contained in this Act shall be construed to authorize any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over the curriculum, program of instruction, administration, or personnel of any educational institution.

Approval of State Plans. The Hill-Elliott Bill contains provisions for state plans or similar arrangements to be approved by the U. S. Commissioner to govern the administration of various parts of the Act.

Establishment of Commissions. The Bill would establish several special commissions with varying powers. For example, the National Advisory Council on Science and Education would have substantial powers.

Basis of Allotments. Allocations to the states are generally on the flat grant basis in accordance with the proportion of pupils, students, and persons in the state to the total in the United States. In the case of Title V, Part A, account is taken of the relative ability of the states to finance education as indicated by personal "income per child of school age."

Matching of Federal Funds. In some cases the federal appropriations must be matched by the states, and in others this requirement is omitted.

Judicial Review. This Bill contains the same provisions for judicial review of decisions of the Commissioner of Education as the Administration Bill.

BASIC EDUCATIONAL POLICY AND PROCEDURE

The basic weakness of the two bills analyzed above is that they are a product of events of the moment, rather than the reflection of a mature national policy for education.

Who can believe that either of these bills would now be before Congress if the sputniks had not been launched into outer space? Less than a year ago legislative and administrative energy in Washington focused on a bill for "federal aid for school construction." Now from both political parties come bills which bear no remote resemblance to the ones fought over in the previous Congress. Why the sudden switch? Is it based on fundamental considerations, or upon passing events which for the moment claim public attention?

The school construction measure of a year ago might have done some good. Fiscally, however, it was a penurious, little proposal. To every \$40 the hard-pressed boards of education of the United States already had to spend, there would have been added a dollar.

The two bills analyzed above, to be sure, include a number of items which are essential parts of a break-through educational program. More scholarships are indispensable if the tens of thousands of able youths who terminate their schooling prematurely, partly or solely owing to lack of family resources, are to obtain the advanced education which na-

tional security demands. Something radical must be done to stop the waste of talent which is now primarily responsible for shortages in skilled manpower, not only in science but also in many other fields.

Certainly we need more and better-prepared teachers in science, mathematics, and modern foreign languages.

The student loan part of the Hill-Elliott Bill is a desirable supplement to a scholarship program. The work-study item in the same measure is both imaginative and desirable. It would provide educational institutions with valuable service, students with financial help and worthwhile experience in their fields of study, and would make the cost of their schooling less a gift and more an earned benefit.

The provision of science teaching equipment would help to remove a major handicap in this field; namely, lack of money for expensive up-to-date, but essential, laboratory facilities.

Funds to enable higher educational institutions to prepare more teachers of science, mathematics, and language are badly needed. The cost of advanced training cannot be met wholly by teachers, as the legislation recognizes. This is particularly true as long as the Federal Government stubbornly refuses to recognize expenditure for this purpose by the teacher as a deductible item on his income tax form.

Better guidance and counseling are essential. Parents and students need more valid information and advice than are now provided in planning the careers of the ten million students enrolled in high schools and colleges.

Undoubtedly, the legislation in the Hill-Elliott Bill of the Democrats and in the Smith-Hearns Bill of the Republicans contains features which in themselves are desirable. Considered as a whole, how-

ever, neither bill is at all adequate to meet either the immediate or the long-term educational needs of our country. This applies more to the Republican than to the Democratic bill, but it is true of both bills. Why is this so?

The proposed legislation is not the reflection of a national policy for education, based on available research and mature deliberation as to its meaning. Rather, it is a response to a dramatic event which has currently captured the attention of the people. The sputniks triggered this legislation.

Why should the big idea in federal educational legislation be school construction in one year while in the next it is cast on the legislative scrap heap, and an entirely different measure claims the attention of Congress and the Administration? It is because opportunism, not mature policy, dictates federal relations to education.

The proposed legislation fails to face the inescapable fact that the so-called "failure of education," so much heard of today, is primarily a result of financial starvation of our schools and higher educational institutions for more than a generation, and especially during the past decade. The factors responsible for this malnutrition are clear. They are the rapidly mounting student enrollments, particularly in the upper and more expensive years; the decline of property, the principal source of educational support, as an adequate tax base; the fabulously costly advertising campaigns which have cajoled the public into paying for longer, wider, over-garnished and over-powered automobiles and many other expensive luxuries which are much less essential than the schooling of children and youth; the incessant propaganda to slash taxes, often regardless of the effects on indispensable public services

such as education; and the pre-empting of 75 per cent of all public revenue to meet the fabulously expensive federal bill for past wars, military preparedness, and other national services.

Congress has recognized the impact of federal fiscal action in some communities. It has provided substantial support for education in several hundred "federally affected" communities—those with swollen school enrollments and lessened taxable resources resulting from federal establishments and war preparedness industries. The impact of federal budgets of \$72 billion, however, is even more severe on thousands of local communities less able to meet the cost of rising school enrollments than on the comparatively well-off federally affected areas. In the bills discussed above, Congress has taken little account of the fact that all local communities are "federally affected" today. They will continue to be so affected, unless there is compensating federal action for support of education.

There are a number of measures which must be taken to provide the quantity and quality of education which national security and progress require. One indispensable requirement, however, is money. Without money most other steps will be futile. The teacher shortage and the school-building shortage are a consequence of insufficient financial support for education.

More school revenue can and should be raised by the states and localities. The evidence more insistently testifies each year, however, that better local and state support alone cannot do the job. Such support must be encouraged by imaginative federal leadership, supplemented by substantial federal support.

What would be gained by flooding the schools and colleges with more students by means of scholarships, loans and

work-study help, good as they are in themselves, if there are too few qualified teachers to teach these students?

In 1950, 9,096 fully qualified science teachers graduated from our colleges; in 1956 only about 5,000. But this is only half the story. Of the college graduates who prepared to teach science, for example, only 60 of each 100 actually accepted teaching positions.

The median salary for beginning secondary school teachers in the United States is \$3600 a year; for beginning engineers in industry, \$5200.

In these facts is found the real cause of the shortage of qualified teachers, not only in science, mathematics, and foreign languages but in nearly all subjects at all school and college levels.

Industry receives billions of dollars of "federal aid" each year in the form of government contracts for military preparedness and other purposes. School districts receive no such contracts. They must compete against the Federal Government in raising money for the schools, and against federally financed industry for personnel to staff the classrooms. It is an uneven struggle. The financial crisis of the schools is rooted in the combination of circumstances described above.

Economists testify that the nation has fully adequate ability to finance an educational program appropriate to our times. They say that the real problem is one of adopting fiscal methods whereby a sufficient portion of this ability may be allocated to education.

The bills discussed above do not face these inexorable facts. Their emphasis is primarily on keeping more able students in school and on training more teachers. These aims, good in themselves, will worsen rather than improve the situation if there is not enough money to employ qualified teachers for the increased number of students.

The yearly appropriation proposed by the Administration bill has been headlined as a "billion dollar measure." Actually, the first year's appropriations would total \$225 million. A part of this, however, is for present and increased appropriations for the undertakings of the National Science Foundation. The President's measure requests only \$145.5 million of new money grants to education in the states. This is less than half the meager \$325 million which was proposed for school building construction in the states by the administration a year ago. To each \$1.00 being spent for public schools, the Administration bill of a year ago would have added 2.7 cents; the current bill would add 1.2 cents. The Hill-Elliott Bill would add about 3.5¢. The insufficiency of these pittance to make any substantial impact on the financing of education is evident.

The proposed bills are questionable in other respects also. They generally allocate federal funds to the states on a flat grant basis; that is, a state receives the proportion of any appropriation which its student enrollment, or other unit of need, bears to that of all states. This would be all right if the total of the appropriations was substantial. But it is not. Hence, through equalization, the money should go where it is most needed. It would do the opposite.

A function which the Federal Government alone can exercise is action to lessen the wide differences in ability to finance education in the states. It alone can establish an acceptable floor of financial support under the schools in all states and localities. Disparities in ability to finance education negate equality of educational opportunity. They are primarily responsible for the slum areas of American education. The critical school problems of New York and other great cities have their roots in these areas. Penalties of ed-

educational neglect cannot be quarantined. They cross state lines to plague rich as well as poor states. They cost less in money and endanger national well-being less seriously if dealt with through preventive rather than curative measures. These basic considerations find limited expression in the proposed bills.

Again, both bills are unduly restrictive and prescriptive. They are restrictive in that they wholly or largely limit funds to such subjects as science, mathematics, and foreign languages. On what evidence is this preference based? Are these fields more important than those which provide the foundation for intelligent citizenship in this complex, fast-changing period?

Probably most serious, the bills would launch the Federal Government into a policy of control of the program of instruction and educational personnel in the states. What else could be the effect of legislation which selects certain subjects and teaching personnel for financial and other preferment?

Every basic study of federal educational policy in the past generation has warned that federal action in the states should be confined to fiscal matters and avoid control over the curriculum and personnel of the schools. Yet the proposed legislation inherently, even though that may not be the intent, would be a major move in that direction by the Federal Government.

The two bills generally require that each state to secure the grants must draft a detailed plan, according to federal specifications, which must be approved by the U. S. Commissioner of Education or other federal authority. Currently there is protection against abuse of this power because of the quality of the present Commissioner of Education and Secretary of the Department of Health, Ed-

ucation, and Welfare. But education is not always so fortunate in its Washington personnel. Furthermore, in several instances special federal commissions and committees are set up in the legislation to exercise advisory and semi-administrative functions. Would this be one more step toward scattering educational responsibility in Washington as opposed to the coordination recommended frequently in the past?

It would have been far wiser to recognize that the citizens of the states and localities are keenly aware of the shortcomings of American education today. They have long been shouting them to deaf federal ears. Federal funds going to the states should establish a financial floor of support. The development of curriculum and personnel should be left to state and local boards of education and administrative offices.

PROGRAM OF NATIONAL EDUCATION ASSOCIATION

The legislative proposal of the National Education Association was anticipated in a remarkably fine statement issued by the Educational Policies Commission of the NEA and the American Association of School Administrators. This statement, entitled *The Contemporary Challenge to American Education*, deals with the role of education in the present world scene—as it has seldom been appraised in recent years—and points the way for federal action along lines which are both sound and courageous.

The Legislative Commission of the National Education Association has translated the program of the Association into more specific terms. This program has three parts: the short range, the intermediate range, and the long range.

For the short range, the emphasis is on

higher education, particularly at the graduate level, including opportunities in the fields of mathematics, science, and technology. The NEA advocates 80,000 college scholarships for undergraduate study, 20,000 each year for a four-year period. It also advocates 5,000 fellowships per year for graduate study, rising to 15,000 at the end of a three-year period. The scholarship awards would average \$1,200 a year; and the fellowship stipends, \$3,000 a year; the cost of these two programs would begin at about \$40 million and rise to about \$140 million annually in four years.

An intermediate-range program, according to the NEA, is needed at both secondary and higher levels to provide for recruitment, training, and retraining of teachers in most subject-matter fields, including mathematics, science, and foreign languages. Such programs would involve federal assistance both to training institutions and to students. The NEA warns, however, that federal legislation which would shift the salary levels of teachers of particular subjects, such as science, would have questionable effects on teacher morale and might cause other difficulties in local school systems.

The long-range needs of the schools are also stressed by the NEA in its legislative program, which calls for improvement of the underpinning of the entire enterprise of American education, beginning at its foundation in the elementary schools. It is proposed that federal grants be made to the states beginning at \$1.1 billion in 1958 (\$25 per school-age child) and increasing to \$4.5 billion in 1961 (\$100 per child) to be used to supplement salaries of public elementary and secondary teachers without restriction as to subject *or* for construction of school buildings. The states would be required to maintain established rates

of financial support. Control of the school curriculum and school personnel would remain in the hands of local and state authorities. Federal control is specifically prohibited.

In support of this long-term program, the Educational Policies Commission states: "It is futile to expect that a multitude of small, limited projects can do much lasting good for American schools and colleges. The real need is for an infusion of public (at all levels of government) and private support on a massive scale. . . . The challenge before American education ought not, therefore, to be regarded as a matter of competition with Soviet science, technology, or education. The real challenge to America is to fulfill the great potential of her own ideals."

The proposals of the National Education Association are sound in a number of fundamental respects. They are based on a national policy for education which takes account of the educational needs of our society and the conditions which stand in the way of their fulfillment. It proposes a sufficient amount of federal support, on a minimum basis to begin with, but stepped up to a level which would have substantial financial effect. It is also enough to be a first step toward somewhat ameliorating the shocking disparities in school support among the states which now deny equality of educational opportunity. It would limit federal prescription to a minimum, and to the area of fiscal support as opposed to curriculum and personnel.

THE NEA BILL

As this article goes to press the NEA bill (H.R. 10,736) has been introduced in the House by Representative Metcalfe. An identical bill is being introduced in the Senate (S. 3311).

It should be noted that this legislation

differs in scope from the proposed NEA program described above. It is limited to the elementary and secondary school levels. It would authorize federal funds to assist the "States and local communities in remedying the inadequacies in the number of their teachers and teachers' salaries and the shortage in classrooms." The amounts authorized and methods of

allocation to the States are essentially those described in the paragraph above dealing with the long-range needs of the schools as seen by the NEA. It is to be hoped that the other parts of the NEA program are to be incorporated in additional proposed NEA legislation or in bills which are introduced from other quarters.

Sputnik and American Education*

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EVERY thoughtful American is properly concerned about the meaning of the Russians' dramatic success in putting a satellite in orbit 560 miles from the surface of the earth. Many are worried about the military significance of this epoch-making feat. They foresee hydrogen bombs being dropped from a similar instrument into the midst of our cities and the devastation and death of Hiroshima multiplied a thousand times. They share a common humiliation in the realization that our nation, which has boasted the greatest wealth, the most education, and the largest force of skilled workmen, has been forced into second place in at least one very important area of science and technology.

There is no question that being outstripped by the Russians in these scientific developments has placed us in a weakened military position. The Gaither Committee says that the nation is in the "gravest danger in its history," exposed as it is "to an almost immediate threat from the missile-bristling Soviet Union."

An equally serious loss is the damage to our prestige in the family of nations. In terms of status and the ability to gain

the support of other nations through admiration or intimidation, the Russians have made a grand slam.

Yet Russia's launching of Sputnik may be a real boon to the United States. It should make us realize that in one realm of creative intellectual endeavor at least one nation has surpassed us. It should warn us that the present dramatic success of the Russians in the science of space is probably only the forerunner of many others equally impressive. The Russian intention to surpass us in other scientific fields is made abundantly clear in the recent statement of Alexander N. Nesmeyanov, chairman of the Soviet Academy of Science, who said that "great efforts are still needed to beat the United States on all scientific fronts." It should make us realize, therefore, that no emergency program in one intellectual sphere will quickly re-establish our scientific supremacy, for the Russians are doubtless already husbanding a large stock pile of new ideas and plans to accelerate their scientific advance.

As is our custom as a people, we think immediately of a crash program, an intensive and arresting effort to deal swiftly with a serious problem. Our government must, of course, give prompt attention to plans for re-establishing our competitive advantage in the military arena. We must exploit quickly all the

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scientific knowledge and skills available in the production of weapons of offense and defense.

Fortunately, however, our people are exhibiting an immense amount of good sense in recognizing that the solution of our present difficulties related to Sputnik calls for something more than larger funds to build bigger and better satellites. Even though not in possession of all the facts, our citizens intuitively realize that the causes of our inadequacy must be fathomed in more complex social forces. While making every effort to defend ourselves militarily, it is with matters of social values, political institutions, and educational practices that we must be primarily concerned if the gap between our own scientific developments and those of Russia is to be closed. Only thus can we be certain that the next generation, now in our schools and colleges, will not find itself more embarrassed on the international scene and more insecure at home than our own.

We cannot use Russian methods to overtake them.

In dealing with the present situation the first major fact to be recognized is that we cannot match the Russians in science and technology, or in any other endeavor, by adopting their own practices. To the extent that we ape them we will be losing the cold war by turning our own democratic state into a totalitarian society, as we began to do under McCarthyism. The spectacular speed with which the Russians have been able to outstrip us in some areas of science can be explained in large part by the power Soviet leaders have over the private lives of the Russian people. Unlimited money can be poured into salaries, buildings, libraries, and equipment. Individuals can be tested, classified, and

ordered into any program of studies deemed by the leaders to be of use to the state.

We can do none of these things. To the extent that we adopt such measures we become a totalitarian society. In the present situation, therefore, we cannot through the powers of the state dragoon scientists into government research and the production of satellites. We cannot arbitrarily restrict the production of consumer goods in the interest of a military build-up. We cannot commandeer students into classes in science or engineering, without regard to their personal occupational choice. To do these things even in the emergency we now face would be to abandon our most cherished personal freedoms while embracing the most repugnant controls of totalitarianism. Reason and persuasion, not coercion and control, must be our methods. Hence the success of our efforts will depend upon the promptness and effectiveness with which our officers of government make known to the public generally the exact situation in which we now find ourselves and the sacrifice of luxuries, comforts, and treasure required to meet this emergency. To this kind of candid appeal our people will, as they have in the past, respond with unselfish dedication to the task at hand.

Within the context of our pattern of living what can be done to meet the present challenge? More importantly, what can we do in education to guarantee an adequate future supply of an intellectual elite in all phases of our national life?

In all the efforts to strengthen our position in science vis-à-vis the Russians, one concept should dominate our planning. There is great danger that in our eagerness to move forward rapidly in science and technology we will neglect

other branches of learning that are no less important in a democratic society. There is reason to believe that the Russians are using a disproportionate share of their national resources for education in science, with a consequent impoverishment of the humane disciplines which constitute the enduring basis of our culture. Such policies involve less danger in a totalitarian society in which large social policies are laid down by a small directive class. In a nation like our own, however, which from the beginning has depended upon the general enlightenment of the people for wise decisions on social and political matters, a broad education in all the major branches of knowledge is indispensable to the health of the nation. Moreover, the enrichment of life for the individual depends no less upon his acquaintance with the literary, artistic, and philosophic heritage of western and other civilizations. Though it may be necessary in the present emergency to attract more students into scientific fields and to spend an excessive proportion of our resources for scholarships, teachers, buildings, and equipment related to science, the ongoing educational program must maintain a proper balance of learning for all enlightened citizens.

There can be no crash program in education.

In considering the steps to be taken in the academic world in the immediate future, it must be recognized at the outset that there can be no such thing as a crash program in education. Education is a slow process at best and, regrettably, we have not been operating our educational system at its potential best. Within limits, learning can be speeded up by exceptional teaching, increased motivation, and wise guidance, and students can be saturated with facts in a relatively brief

time. But these processes do not cultivate the powers of reflection, imagination, and reasoning without which one can hardly be called educated. Moreover, these attributes of mind are the very qualities needed in the kind of basic scientific research which has given the Russians their present lead.

The nearest thing to a crash program one can hope for, then, is limited to the shifting of persons with the necessary advanced education and research experience from activities of relatively low value in the present emergency to those of high priority. These efforts can be accompanied by acceleration of the education of those who are near the end of their advanced formal education. The great benefits which would automatically flow from an improvement of education at the lower levels must be scheduled in terms of ten to twenty years. The recent drastic proposals for changes in the content and methods of education in our elementary and secondary schools, even if they had merit (and many have none), would not help in the near future. Some, for example, are proposing more science and mathematics from the early grades through high school, heavier assignments in school and out, more rigorous discipline throughout the system, required instruction for all in science and mathematics through the college years, elimination of vocational studies, and a host of other panaceas. Whatever their merits, none of these suggestions will help at all in the present emergency.

The men and women who contributed most to the recent startling scientific accomplishments in Russia were not school boys or even recent graduates of the universities. They were scientists ripe in learning, mature scholars capable of doing and understanding the most advanced research. Though a few may have been

relatively young, the educational programs they had completed beyond the elementary school would cover not less than twelve years and usually much more, to which several years of research experience were doubtless added. It is obvious, therefore, that proposals, however meritorious, relating to the early years of schooling can be of little help in offsetting the initial advantage which Russian scientists now apparently hold.

We must shift scientists from nonessential activities.

The only way to increase the quantity and quality of basic research in the immediate future is to make better use of the scientists already capable of adding to the store of theoretical knowledge. This plan would involve identifying the persons who have already had the essential formal education and moving them into research work related more closely to the national welfare than their present activities.

There has been much talk since World War II of the shortage of engineers and scientists. No doubt there are such shortages in some branches of business, industry, government, and the universities. Yet there is considerable evidence that if engineers and scientists were more effectively used these shortages would markedly shrink. Even though shortages do exist, figures provided by the National Research Council for the years 1945 to 1955 inclusive show that 1,762 persons received the Doctor of Philosophy degree in mathematics, 4,175 in physics, and 9,027 in chemistry in the universities of the United States. In the same period, several hundred thousand degrees in engineering were awarded. There is no way to determine the intellectual quality of these persons, or to compare it with that of Russian scientists. How many of

our scientists are capable of genuinely original research no one can say. It is certain, however, that a large percentage of very high-grade scientists have been trained for research and are now employed in some branch of our economy.

The significant fact is that too few qualified scientists have been engaged in research even remotely related to the chemical, physical, or mathematical problems involved in satellite development, or in any other efforts to advance theoretical knowledge. Indeed most of them are not engaged in any investigations which could conceivably result in a major break-through in theory. Many are devoting their intellectual energies to perfecting new television apparatus, discovering more effective detergents, or developing more resilient automobile springs. Russian scientists, on the other hand, have been driven into pure research by the authority of the state or lured into it by large financial rewards and high social status. In this country the salaries paid to scholars and the relatively low prestige of the intellectual have forced many of our best scientific minds into industry. There the financial reward is from two to five times that of university teachers and research workers, and there they can avoid the opprobrious terms "intellectual" or "egghead." The first critical factor in our present inferior position is clearly a matter of values, the things we prize enough to pay for and to honor. When we consider Sputniks and all the other potential products of theoretical science as valuable as new automobiles and improved nylon stockings, when we respect intellectual accomplishment, then we will be able, with our enormous wealth and educated manpower, to resume the lead in the world of science and in other cultural enterprises.

Until a well-planned, long-range educational program has redressed our present weaknesses, drastic decisions will have to be made by our government and by our people regarding the place and the use of scientists in our society. For years there has been a roster of scientific personnel in this country. The amount and kind of their education, their present place of employment, the type of work they are engaged in, and a host of other relevant facts are available. If, as Dr. Teller says, we are ten years behind the Russians, the government ought at once to canvass our needs for scientists and establish procedures for shifting them from activities with relatively low social value to those which could restore our scientific supremacy.

Unlike the Russians, we cannot order scientists to leave industrial, teaching, or governmental research of certain types and to enter upon others closely related to the national welfare. We can, however, publicize the need, exhort industries to release such persons as are qualified and required, and provide salaries and working conditions which will attract the most imaginative minds and the most dedicated scholars. A mustering of the large corps of talented scientists already available will carry us through this trying period until a larger group of promising young scholars can be recruited and trained. The strongest argument with industries should be that the practical problems with which they deal can only be solved and new processes and products developed on the basis of pure research which at the outset may appear to have no immediate value or purpose. In a nation as wealthy as the United States there is, of course, no reason why the supply of scientists and all other highly educated personnel cannot be adequate to all the needs of industry, gov-

ernment, and the universities. But even with clarity of purpose and energetic efforts, this goal cannot be reached for ten or fifteen years because of the time required in the process of education.

The graduate student must be better paid.

A second effort to produce an early increase in scientific personnel relates to the salaries of graduate students and professors. Through the National Science Foundation and some corporations a considerable number of well-paying fellowships have been provided for graduate students of small means. Those granted by the many corporations, however, are frequently restricted to use in research projects connected with the production processes in specific industries. Hence the type of investigation needed for the expansion of theoretical knowledge in mathematics and science, the new body of knowledge from which satellites are born, has not been sufficiently supported. For the same reason, it would be unwise to focus too sharply on our scientific needs related to satellites. It is important to remember that the Russians are, as Dr. Nesmeyanov says, working as diligently in other scientific fields, such as biology and nuclear physics, as in astronautics. Since we do not know the areas in which new scientific developments may occur in Russia, both industry and government must contemplate large-scale support of a well-rounded research program.

Fortunately the fellowship program of the National Science Foundation and some of the military research programs have had this broad objective in view. The stipends awarded to graduate students, most of whom are married and have families, must be the equivalent of full-time salaries so that the student will

neither be delayed in his education by outside work nor harassed by privation and insecurity. The salaries of Fellows of demonstrated promise should be from \$5,000 to \$10,000 a year for a period of three years, or even five if a particular research project requires a longer period to be brought to completion.

Professors' salaries must be doubled.

The low financial reward for those who teach and do research is another real bottleneck in scientific development in the United States. Indeed, this factor is the basic cause of the crippled condition of our educational system from the first grade through the graduate and professional schools. But in the fields of mathematics and science the situation is particularly acute because the competition for the ablest scholars is intensified by opportunities in government, business, and industry. Most college and university presidents have had a science teacher ask to be released from his position because he has had an offer in industry. Since the salary would be twice or three times as large as his academic compensation, he feels he cannot turn the opportunity down. He generally adds that he likes academic life, but that he has to consider the welfare of his family. On an academic salary he finds it impossible to buy a suitable house, carry adequate insurance to protect his loved ones, take a vacation, or send his sons and daughters to college.

Seductive financial appeals from industry, where the higher salaries can merely be added to the cost of production and passed on to the consumer, or deducted from taxes, have resulted in the educational world's continuous loss of many of the most able, imaginative, and dynamic scholars. That so many able

persons remain in academic work in spite of low salaries is testimony to their high-mindedness and their dedication to youth and to the nation. Until the professors who must produce the scientists the country so desperately needs receive salaries of from \$25,000 to \$30,000, roughly comparable to the compensation of their peers in the business world, the supply of top-flight scientists able to teach their successors and able to do research will simply not be available. The proposal that academic people ought to have larger salaries is neither new nor radical. Now, however, since the scientific achievements of the Russians have shocked our people into an awareness of the present danger, it may be hoped that concern for the national welfare will galvanize public leaders inside and outside the government into action to correct the present inequities.

Federal grants for salaries and for physical facilities.

In this connection it might be instructive to study the salaries and the social status of scholars in Russia to determine the possible influence of these rewards on the size and the quality of the academic guild. It is reported that Russian professors receive from five to ten times as much salary as ordinary workmen. In our country there is little difference between the two groups except in the cases of the most accomplished men and women in the world of learning. Since many universities are incapable of meeting their current financial obligations without large deficit spending, no spectacular increases in salaries can be expected without large additional resources. The Federal Government will have to provide a large part of these funds if the Russian lead in science is to be nullified.

Other policies of the government can

be equally effective in holding fledgling or mature scientists in basic research. In addition to supplying funds for satisfactory salaries for research workers, the government ought to develop long-range programs for the support of higher education involving substantial grants to universities for science buildings and equipment. Universities cannot be expected to bring into their faculties highly paid professors and to supply the needed expensive facilities on the basis of uncertain commitments renewable from year to year. The Congress has the power and the responsibility to make large sums available to institutions of higher education over a five- to ten-year period. If this were done, the income from government sources could be foreseen with reasonable accuracy and the financial obligations of these institutions stabilized.

Scientists must be free to investigate.

The Federal Government can also increase scientific production by adopting policies consistent with the nature of science and congenial to scientists' methods of working. Science flourishes under conditions of unrestricted investigation and freedom of communication. Actions of government or of citizens generally which restrain the individual scientist's freedom of inquiry or the interchange of his ideas with other scientists impair the total scientific enterprise. In the present situation, such practices actually undermine the national welfare.

Some practices of Congressional committees and of the executive branch of the government have in recent years violated the basic principles of scientific inquiry. The motives and the patriotism of scholars have been impugned, their characters maligned, and their livelihood endangered by governmental bodies.

Personal injury and the abridgment of constitutional freedoms have been accompanied by damage to our scientific efforts. These activities have doubtless driven out of essential scientific investigation many capable scholars. Nobody can possibly measure the damage to our national defense effort and to the well-being of our scientific enterprise caused by Senator McCarthy and his supporters. That it was considerable, however, no objective analyst of our present weakened position can doubt. Scholars must be freed from interference in their work and we need to reappraise the place of the intellectual in our society. The so-called egghead ought to be honored rather than lampooned. It is now literally true that only he can lead us out of our present dangerous situation.

Where have science leaders of the 1900's come from?

These proposals for immediate action related to the parts which industry, government, and citizens generally can play in strengthening the scientific enterprise should be paralleled by changes within the educational system itself. One such action is concerned with the graduate schools of universities, the institutions which produce scholars in all fields of learning, including the sciences and mathematics.

Since the beginning of this century our universities have produced many renowned scientists, among them Michelson, Millikan, Compton, Lawrence, and others who amply prove the point. But in terms of the percentage of our people who have had the advantages of higher education, the record compared to that of other countries is disappointing. When one reviews the major scientific advances since 1901, the achievements of Lorentz, Becquerel, Curie, Planck, Einstein, Bohr,

Heisenberg, Schrodinger, and Fermi make it obvious that until very recently the products of foreign education have occupied the center of the stage. Some of our own most distinguished scientists (Millikan for example) received their advanced education in foreign universities. Our failure to produce enough highly imaginative, inventive research scholars must in considerable part be the result of defects in our educational system.

American university education needs to be overhauled.

Weaknesses in the lower schools deserve serious attention. But the element of time demands that the shortcomings of graduate education be given first consideration. The plain fact is that graduate education in the United States has not sufficiently encouraged creative intellectual achievement. A significant percentage of those who obtain the Ph.D. degree are neither seriously interested in adding to human knowledge nor capable of doing so. Many of the practices and policies of graduate education encourage routine intellectual processes. As they enter upon their first test of creative intellectual ability, many students are given a problem closely related to a professor's own research. The techniques, apparatus, and library resources required to explore the problem are suggested by a senior research worker. In some cases much of the dissertation is written by the sponsor.

A few years ago the long-time head of a physics department in a prominent state university was asked what percentage of those who had received the Ph.D. in his time had had the imagination to find a problem worthy of study and had then carried their research project through to completion with a minimum

of direction from a senior colleague. His estimate was one in ten. That this may have been a general situation is suggested by studies of the scholarly production of mathematicians and historians which show that only 15 to 20 per cent of those who receive the Ph.D. degree in these fields thereafter ever do any significant research. For too many, their professional education as scholars is not an exciting intellectual experience. It is not one in which the individual loses himself in a work of consuming interest. It is not viewed as it may well now be, as an effort which could determine the destiny of the nation and of the world.

The processes of graduate education are burdened with traditional and meaningless requirements. They include a given number of years of study in residence, the superficial study of foreign languages which almost none can then use, and a system of academic bookkeeping in which the number of hours of work completed in the classroom or laboratory, rather than measures of genuine intellectual growth and power, determine the outcome. These requirements, extraneous to true scholarship, dampen intellectual enthusiasm and standardize scholarly accomplishment. Additional handicaps are imposed by the student's needs to make a living through outside work.

As Dean Barzun of Columbia University has pointed out, these encumbrances and interruptions often extend the graduate experience to five, ten or even more years. And, more important, the total impact of this experience which should excite the intellect, quicken perception, and embolden the spirit of inquiry, actually often leaves the finished product weary in mind, body, and spirit.

The entire program of graduate education needs immediate reappraisal. Those

of superior intellectual gifts should be admitted earlier, unburdened of meaningless rules and regulations, freed from monetary worries, and charged with a passionate devotion to the search for truth. Though the immediate purpose in these changes may necessarily be the preservation of the nation, the long-range objective should be to create a generally more vital system of higher education. To gain this end will require, however, an overhauling of the entire structure and practice of graduate education in the United States, with the national interest taking precedence over vested academic interests. Tinkering will not do. To change the residence requirements from 60 to 55 credits, to permit graduate students to satisfy the language requirement by studying Russian instead of German, to raise graduate stipends from \$2,500 to \$3,000, and to make other trivial alterations will be to proceed in the laborious manner customary in academic life. The times urgently require a more critical assessment of present practice and a more dynamic program for its improvement.

The actions thus far proposed can be taken immediately to meet the Soviet challenge. In a period of from five to ten years they could result in a rapid acceleration of basic scientific discovery. Whether these changes can be speeded up in time to avoid a devastating attack on the United States is a question which only history can answer.

Only a long-range program, however, extending over a period of several generations, can vouchsafe a world in which our children and their children can enjoy the freedoms which we have known. The crucial element in any such program to strengthen the position of the nation in science, and in many other aspects of our common life, is the quality of our

entire educational system. The people of the United States from the very beginning have had an abiding faith in the value of education. The constant extension of the opportunity for education to larger and larger numbers of youth is tangible evidence of this deep-seated conviction.

But our present embarrassment stems partly from the fact that this idealistic conception has not been matched by a willingness to pay for its realization. The actual amount in dollars spent for education of all kinds has increased from 6 billion in 1940 to nearly 16 billion in 1957-58. In the same period, however, the number of children to be served and the cost of operation have skyrocketed. The supply of teachers and buildings has not kept pace. A gradual deterioration of education for millions of children has been the result. In many communities half-day sessions, classes of 40 or more pupils, unqualified teachers holding only emergency certificates, classes in stores, factories, and church basements have been the scandalous order of the day. This educational privation is found primarily in the poorer states and communities. But in the past ten years, the press has carried many stories of wealthy communities in which school taxes and bond issues have been voted down, communities in which the two-car family, the well-filled wine cellar, and the summer home at the shore are typical rather than exceptional. The financial plight of many colleges and universities both public and private presents a similarly disheartening picture.

In attempting to place our scientific enterprise on a level with that of the Russians, to say nothing of improving the other essential social services which require advanced education, our first decision will have to be our willingness

to pay the bill. The Russians some years ago recognized that world supremacy in science could only be achieved by sacrificing other satisfactions in favor of more and better education. Comparable figures are not easy to obtain, but informed persons believe that the Russians are putting a much larger percentage of their available national resources into education than we are. In any event, our unwillingness to spend more than 3 or 4 per cent of the Gross National Product of over \$400 billion for all forms of education is the seat of many of our present difficulties.

We will not come abreast of the Russians—indeed, we will fall further behind them—until the educational budget is materially raised. When teachers' salaries attract the most capable of our young people into the profession, when the school plant is modernized and equipped with tested teaching materials, when American children attend full-day sessions under skilled teachers, when the majority of our colleges and universities are no longer limping along on large deficits, when all young people of college age are able to get a higher education suited to their abilities, then we can expect the educational system adequately to serve our needs in the domestic and international spheres.

In recent years many voices have been raised in criticism of American education. Sputnik has orchestrated these voices in a chorus of lamentation. The main theme is that, because of modern educational theory, pupils in our schools have been encouraged not to study such difficult subjects as mathematics and the sciences. Statistics have been cited to show the falling enrollments in these subjects in our high schools. The most impressive and also the most misleading of these presentations appeared in *U. S.*

News and World Report in a report of an interview with Professor Arthur E. Bestor of the University of Illinois. The statistics cited purport to show a shocking drop since the turn of the century in the percentage of high school students in the United States studying science (from 84 per cent in 1900 to 54 per cent in 1950) and mathematics (from 86 per cent to 55 per cent). Professor Harold C. Hand of the same university has shown, however, that the percentage of students taking science in high school has not dropped. On the contrary, the percentages have risen from 84 per cent to 98 per cent in science and from 86 per cent to 90 per cent in mathematics. Moreover, the high school population has increased from 519,251 in 1900 to 5,399,452 in 1950. A percentage of at least 90 in each subject in 1950 means a tremendous increase in the number of students studying these subjects. Even after eliminating those who have no special aptitude for, or interest in, a scientific career, this is a large reservoir from which to draw 10,000 potential Ph.D.'s in physics, chemistry, and mathematics, more than the total of Ph.D. degrees granted in these fields from 1945 to 1955.

The number should and could be larger, but there are several obstacles to the attainment of this goal. The first is the size of our high schools. In 1952, 824 high schools had fewer than 25 students. Thirty per cent had enrollments under 100. When these students are distributed over a four-year period, and the drop-outs from the freshman to the senior year are taken into consideration, it is apparent that a large percentage of American high schools simply do not have enough students to justify offering instruction in the sciences, especially those requiring a laboratory. Even in advanced mathematics, the demand does

not warrant such instruction in many of the small school districts.

Furthermore, in small high schools it is not possible to have special teachers in chemistry, mathematics, physics, English, history, foreign languages, vocational courses, and the other subjects usually provided in a large comprehensive high school in an urban center. Consequently, teachers whose main interest and training are in literature or social studies may be required to teach science, and the instruction they give is sometimes inferior. The National Science Foundation has launched a number of programs to upgrade these teachers, as well as those originally qualified in science but whose training needs to be brought up to date on scientific developments.

For many years educators have earnestly urged the establishment of larger school units. They have tried to persuade school boards to consolidate ineffective small school districts to make possible larger class groups with special teachers in the various high school subjects. Many states have offered leadership and financial assistance to districts wishing to consolidate. The foregoing figures show that, because such consolidations have not been effected, many American youth have inferior or no instruction in some subjects. If a full complement of subject matter is desired, the establishment of larger high school units should be pressed with all vigor.

Educators have stated that one of the major obstacles to effective and interesting teaching of science in high schools and colleges is the lack of suitable technical equipment. Many high schools and colleges with small enrollments are deprived of such equipment because of its high cost. Here the Federal Government could do something concrete to help in the present emergency. Much teaching

equipment for the sciences can be purchased in European countries for a fraction of its cost in the United States. Because of high tariff rates, however, these materials cannot be acquired at the lower price. Import duties are set as high as 50 per cent.

Efforts by a committee of the American Association for the Advancement of Science to get government action to reduce import duties on these articles indispensable in good teaching have been abortive. In spite of the fact that the total value of such materials constitutes only a negligible percentage of the annual volume of business of the American firms concerned, the latter have vigorously fought and lobbied against any change in the tariff on these articles. Here, again, it may be hoped that the urgent needs of the nation, dramatized by Sputnik, may effect what reason and importunity could not. If the United States Government is serious about its desire to advance the cause of science quickly and materially, a reduction in the tariff on scientific apparatus is an easy and inexpensive way to do so.

Even in the high schools where mathematics and science are now being taught, the number of students taking such courses can be significantly increased, and the quality of learning improved. Certain policies and practices have militated against a full enlistment of the interests of students who are capable of higher education, especially in the subjects with which we are now concerned. The preparatory basic instruction in some elementary schools has not been as effective as it could be. Hence some students come unprepared for and afraid of courses in the sciences and mathematics. Moreover, the reputation which these courses have in some high schools and colleges, because of uninspired and

uninspiring teaching, causes students to avoid them. The guidance programs in some schools fail to identify and guide promising students into the proper courses. The schools can do much to improve science teaching.

One of the most significant factors in this—the failure of students to elect science courses—is totally beyond the control of the schools. That is the attitude of parents. The fact is that some students, when possible, avoid subjects which require hard work and long hours of study. Too many members of the teaching profession have been more tolerant of this attitude than is good for the student or for the country. Often, however, the basic factor in the student's desire to take an easy course is the attitude of parents who do not want their children to do more than the minimum of study to get through. Many seem more interested in having their children get a diploma or a degree than an education. This point of view has been more influential in undermining standards of accomplishment and discipline in the schools than the philosophy of John Dewey. Dewey was an ardent advocate of self-discipline and the exertion of effort toward well-defined goals, as his own life so abundantly illustrated. He was opposed to dull routine, memorization of facts, and the authoritarian discipline imposed without reason. He rightly believed that learning was most effective when self-motivated.

Parents can inspire an interest in learning by valuing it as an indispensable element in a good life and a necessary factor in a healthy society. When parents are as proud of their son's grades in academic subjects as they are of his throwing the pass that won the game on Saturday or of his playing the trombone in the high school band, more students will study

science as well as other subjects with greater interest and success. With full cooperation between teachers and parents, many additional students of appropriate abilities and interests will find their way into courses in science and mathematics and all the other fields of study of equal value in a vital and growing democratic society.

One proposal of increasing popularity to meet the shortages in the sciences involves requirements for all students in certain subject-matter fields. In its most extreme form, the several states are asked to pass laws requiring all students to study science and mathematics. This suggestion is ill-advised. In the first place, it is a modified form of the Russian system of regimentation and coercion, which is repugnant to Americans. Second, many students, by disposition and vocational interest, are unable to profit as much from this type of instruction as they could from others. Third, there is great danger that in the hysteria of the moment we will impose policies and practices which will make intellectual and emotional misfits of a considerable number of our people. We can also create a lopsided society in which science overbalances all the humane and social disciplines of equal if not greater value in the resolution of our domestic and international problems.

The alternative to a universal requirement is a sensitive testing of all pupils in the early years of schooling to discover their abilities and interests. This program needs to be coupled with an efficient guidance and counseling service to get students into a type of advanced education congenial to their abilities and conducive to satisfying achievement. Such a program will produce more and better scientists than compulsory study in fields for which the student has little aptitude

or interest. It will also produce a balanced supply of satisfied workers in all other fields which are equally essential in a dynamic and well-rounded society.

To provide the maximum number of superior high school students* for higher education in the minimum time consistent with their abilities and their health, these students should be identified earlier than is now uniformly the practice. They should be guided into the courses needed for college admission, and speeded on their way to an even tentatively established educational goal. A mistaken notion concerning the nature of a democratic school system has operated to prevent the application of these conceptions in the everyday program of the schools.

Whether we like it or not, there are wide differences among students in ability, interests, and the desire to excel in intellectual achievement. No eutenic or eugenic program is likely to erase these human variations in the visible future. Some teachers and school administrators have adopted or condoned practices which seem to recognize these individual differences only at the lower end of the ability scale. They favor individual attention and special treatment for those of below average ability, and many programs have been established for this purpose. They have been less enterprising in recognizing students of unusual talents and less aggressive in providing special treatment for those who have potentially the greatest contribution to make to American society. Our people are ready for such developments. The quicker we identify the most capable students in all intellectual spheres and provide for them an accelerated and enriched program, the sooner the urgent national need for talented personnel will be met. Higher standards of accomplishment for the most

capable will change education from a dull series of intellectual routines into an exciting adventure. Many parents will accept this type of accelerated educational program at this time, if its plan and purpose are made clear.

Applied to educational policies, this concept of requiring the best efforts of students in terms of their capacity means that those of ability should be moved forward intellectually toward an educational goal as rapidly as possible. They should be guided into as difficult studies as they are capable of mastering, and they should avoid subject matter which needlessly dissipates their time and energy. Specifically in the case of a boy or a girl who expects to enter a scientific field, the high school program should include four years of English, mathematics through trigonometry, three years of one foreign language, at least two years of science, and two years of social studies. This program would still leave two or three units for other electives. Most youth of college ability can complete such a program without harm to mind or body. Indeed, many would be better adjusted emotionally if they had a more demanding program of studies. A false notion has prevailed in the past two decades that exacting intellectual work leads to social and emotional maladjustment. There is no scientific basis for this belief. The difficulty of studies must be adjusted to the ability of students. Too easy a program is just as likely to cause maladjustment and unhappiness for superior students as too hard a program for those of limited intellectual abilities.

GENERAL SUPPORT OF EDUCATION REQUIRED

All the foregoing proposals, though they would provide a larger pool of qualified scientists, really leave the major

long-range problem untouched. The crucial factor in the shortage of trained manpower of all types which stems from deficiencies in our educational system is our failure to support education adequately. The education of our children, considered as a group, has been deteriorating since the beginning of World War II. There are, to be sure, many school systems in the United States in which fully certified, highly competent, enthusiastic teachers conduct their classes in up-to-date, light, fireproof schools with the best teaching materials available. As a result of the dedicated and patriotic efforts of Mr. Roy Larsen and his associates in the National Citizens' Commission for the Public Schools, many children have had better teachers in more modern schools than they would otherwise have had.

But in terms of the growing need for new classrooms and teachers, the national picture of inadequate support remains about as depressing as it was ten years ago. The story has been told so often in the press and on the air that it need not be repeated. It is enough to say that in September 1957 the United States Commissioner of Education reported the shortage of elementary and secondary school teachers to be 135,000. According to the figures supplied by educational authorities in the states, in the fall of 1956 there was a national shortage of 159,000 classrooms. If the fact that some classrooms now in use were built before 1900 is taken into consideration, this figure ought to be raised to 250,000, and the process of obsolescence continues apace.

Since hundreds of school districts have reached their legal debt limit, the school plant cannot be improved in the visible future without outside financial aid. As a consequence of these shortages, 800,000 students attended school only a half of

each school day and 17.9 per cent of the elementary school classes in 1956 (the most recent figure available) had more than 35 children. In the cities of 500,000, over 8 per cent of the classes had 40 or more children. Moreover, thousands of teachers were on temporary emergency certificates, which means that they were unqualified in terms of accepted professional standards.

The consequences of our failure to provide the funds needed merely to bring the schools of the nation up to normal operating efficiency, with every child receiving instruction in an acceptably modern school plant under a properly certified and adequately paid teacher, are now becoming tragically apparent. It is in these shocking facts and figures that we should look for the causes of our weakening scientific position on the international stage. How can we expect pupils to learn as much basic arithmetic and science in half-day classes as in a full school day? How can high school students learn the fundamentals of science when it is taught in classes of 40 or 50 by teachers whose primary intellectual interests are in other fields, in rooms not designed as laboratories and not equipped with necessary teaching materials? How can teachers devote their undivided time, energy, and enthusiasm to their students when they must bring their incomes up to a living wage by driving taxicabs, selling insurance, or testing prisoners at odd hours in the local jail? It is just as foolish to expect children attending school half a day in classes of 35 or 40 taught by unqualified teachers to be educated for life in today's world as it would be to expect the Ford Company to produce the Edsel in the plant of 1920 with engineers educated in 1900 with the materials of construction used in the Model T. Yet this is the miracle some of

our citizens expect school officials to perform.

Many informed and patriotic educators and laymen have been aware of the deterioration in the school enterprise. They pointed out a decade ago that a child's education could not be put in a deep freeze for a period of years. Their exhortations have fallen on too many deaf ears among their fellow citizens. The saddest aspect of our educational inadequacy is not yet apparent to most citizens. The children whose early education was neglected in years past are only now beginning to show that they do not have the essential basic education for their further intellectual development. It is a national tragedy and a national scandal that little can now be done to repair these deficiencies. A considerable amount of the precious talent we need so badly in this hour has been lost forever by a callous disregard of the condition of our educational system. This situation is in strange contrast with the efforts the Russians have made to strengthen education by depriving themselves of many of the comforts, not to mention the luxuries, we take for granted. The disparity between our own efforts to provide basic education for all and the Russians' efforts will doubtless increase until a new generation of children passes through a strengthened and enriched educational program.

This objective can be reached only with the leadership and the resources of the Federal Government. Some local school districts and some states have adequate resources to raise teachers' salaries by 50 per cent and to erect the additional classrooms to accommodate the increased school population and to replace obsolete school plants. It is their patriotic duty to do so without delay. Their best efforts, however, will leave an enormous gap be-

tween the national need for improved education and our ability to provide it on a national scale. There is no necessity to recapitulate all the irrefutable arguments for federal aid for education. We have the necessary funds, as an impartial review of the economy conclusively shows. We lack only the will of the people at large to take this step through their representatives in Washington. Both Democratic and Republican administrations have for a number of years advocated various forms of federal aid. These efforts have been frustrated largely by skillful, powerful and high-paid lobbyists, and by the dissemination of false information among the people. As events now prove, these organizations and their richly supported lobbyists have been toying cavalierly with the welfare of the nation. It is to be hoped that if they are not shamed by the melancholy international events of recent months into a withdrawal of their opposition to federal aid, the people generally whose lives and welfare are in jeopardy will voice their views at the polls.

There is no way to calculate the exact amount of federal aid required to bring the school system of the nation to a level of effective operation. There is likewise no way to determine exactly how many missiles or other forms of weapons are needed to defend the nation against attack. This does not mean that we will delay missile programs until the last facts are available, because in a fluid situation they will never be available. Likewise, the national resources needed to provide the necessary highly trained manpower can never be precisely determined. A beginning must nevertheless be made at once on the federal level to meet the need that exists.

A modest program in terms of our national resources would be a billion dol-

lars a year for five years. Testimony over the past ten years in committees of the Congress shows conclusively that \$500 million a year of federal subsidy of education within the states for current operating expenses would go far to bring teachers' salaries up to a level that would attract and hold competent and dedicated teachers. Testimony before the House Subcommittee on Education and Labor under Congressman Cleveland Bailey's chairmanship in 1957 revealed that \$500 million a year of federal funds, matched by varying contributions of states according to their financial ability would in a few years erase a large part of the deficit in schoolhouse construction. If legislation could be passed in the next session of Congress, as it should be, embodying an aid program of this magnitude, the process of erosion of our educational standards would be retarded and eventually brought to a stop. With this assistance, local schools could restore their programs to a level of effectiveness consistent with our national status and honor, and with our declared purpose of providing full educational opportunity to all children, regardless of their social status or their geographical location.

Another effort to increase the pool of educated manpower can be made by the Federal Government through a substantial program of undergraduate scholarships. Numerous studies in the various states have shown that many of the upper 25 per cent of high school graduates do not continue their formal education. The majority discontinue because of lack of funds. Colleges and universities in a recent year used over \$50 million of their own much-needed resources for scholarships. Some corporations and private individuals also provide large resources to assist worthy students. But there are still at least 100,000 high school graduates of

high quality each year who would attend an institution of higher education if they had the funds.

In view of the national emergency, the Federal Government should establish a national scholarship program with 25,000 grants averaging at least \$1,500, the amount in each case to be determined by the financial ability of the student. These funds should be distributed through state education authorities on the basis of the respective states' economic condition and the number of high school graduates. The total number of scholarships involved over a four-year period would be 100,000 with an eventual annual cost of \$150 million, about half the cost of one aircraft carrier. These scholarships should be awarded to any qualifying student, regardless of his intellectual interests. If, however, it is necessary to use a large proportion of the funds available for science education for a period of years, a provision could be written into the law empowering the President to reserve a certain number of scholarships for students in scientific fields, including engineering. Since student fees do not cover the cost of education, and since colleges and universities are already in serious financial trouble, the institutions accepting these federal scholarship students should receive a substantial grant as well. The total funds involved should be about 50 per cent of the scholarship fund, or when it is in full operation, \$75 million annually.

These proposals involve the expenditure of substantial funds by individuals, corporations, local school authorities, state governments and the Federal Government. The sums involved are, however, really very modest in terms of our national wealth and our expenditures for other forms of defense. The phrase "other forms of defense" is used advis-

edly, for the strength of our military effort and the economy which supports it flow from the education of our people.

Whether the issues are resolved on the battle field or in the council chamber, in the present conflict of ideologies and their economic and political systems, education will be the deciding factor. As never before, the United States needs the intellectual abilities, the clearness of vision, and the moral strength which only the fullest development of all the talents of our people can provide. The times demand a well-considered, long-range program continuously to achieve this goal.

Policies and actions based on expedi-

ency will do no more than restore in us the false sense of pride and security which has already brought us to the brink of disaster. The decisions which we now make regarding the character and quality of American education will in large measure determine our individual and our national destiny. We have thus far avoided the unpleasant responsibility of facing up to the decisions which have to be made and the price which has to be paid to provide an educational program appropriate and essential to the needs of a democratic society in an unprecedentedly dynamic world. We postpone the decisions further at our peril.

A Profile of Fitness in Education*

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THROUGHOUT the country, school officials wrinkle academic brows in contemplation of demanded radical changes in educational affairs. Various publics insist upon, among other things, more science and mathematics, the elimination of declared "soft spots" in the curriculum that have crept in during recent years, and stricter discipline.

The search for persons responsible for this alleged sad state continues with more emotion than reason. Sometimes the finger of suspicion points toward teacher education. At other times school administrators, curriculum directors, and teachers find the accusation directed at them. In the attempt to fix responsibility, parents and taxpayers often blame boards of education, boards of education blame the superintendent, the superintendent blames school principals, principals blame teachers, teachers blame one another, and so on to completion of the cycle back to parents and taxpayers.

EDUCATION IN BROAD PERSPECTIVE

Within this climate of accusation and counteraccusation, certain truths appear self-evident. On the one hand, when the chips of critical evaluation are down, a

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substantial number of prominent educators contend that American schools today are the best in the world. On the other hand, many of these educators agree that mathematics and science should receive increased emphasis in schools and colleges, especially for gifted students. Furthermore, a majority of informed educators accept the premise that students in public schools need broad experiences that help them live fuller and richer lives in homes and communities. These experiences include, besides mathematics and science, the communication arts, fine arts, industrial arts, home and family living, how to maintain robust health and fitness, how to enjoy increasing hours of priceless leisure, useful citizenship, the world of music, the true significance of work, learning how to make a living, and others.

The obvious essentials of learning experiences in any area listed above, if properly taught, represent neither snap courses nor fads when weighed in the balance of education that functions in the lives of people. Take, for example, acquiring the knowledge and skill to manage a budget for a family of five on a weekly income of \$60; or planning a suitable recreation program for the home community.

Educators and others regret the lack of discipline which, in some congested cities, approximates youthful terrorism.

One sometimes hears the view expressed that athletics constitute the last resort of discipline in schools and colleges wherein team members must follow training rules, maintain a high standard of fitness, abide by the rules of the game, and strive for best group interests without personal favor or privilege. Thus a person often learns self-discipline best in connection with experiences outside himself that have meaning and significance for him, rather than in the vacuum of academic subject matter.

Surely the changing culture places complex demands upon education to provide broader learning experiences for youth, often including activities for which the home and other agencies formerly accepted obligation. Many of these subjects or programs no longer belong in the category of fads or frills or fringe areas; they deal with life as youth lives it now and as he prepares himself for happy and successful adulthood in terms of standards approved by the prevailing culture.

Educators believe firmly in the need for inspired teachers with improved preparation and the ability to kindle the interests of youth in a variety of subjects or programs accepted by society as integral and interrelated parts of sound and total education.

Perhaps the renewed public concern about education will produce beneficial results in the years ahead. Much depends upon leadership and statesmanship which will guide public opinion in the right direction. The American people, by democratic process, have shown again and again their ability and willingness to choose the right course of action when given the opportunity to learn the facts and appraise the consequences. This truism has led to a widely accepted administrative policy that the community can

have the kind of schools it wants and is willing to pay for; and a corollary policy that communities usually find a way to have the kind of schools they want.

In reaching these important decisions, communities must depend upon the guidance of competent educators who point the way by viewing the child or adolescent in his entirety as a biological organism living in a social world of complex freedoms and restrictions. And the wide variety of basic knowledge, attitudes, habits, and skills he acquires as a child or an adolescent best predicts the kind of adult he will become. School authorities who recognize the phenomena of normal growth and development, and who take into account the significance of individual and social needs, seldom persist in the dichotomy of mind and body. Insofar as youth is concerned, biological urges usually constitute more fundamental drives than adult-imposed standards. Education functions best when it includes experiences that attempt to reconcile nature and nurture. Thus schools and colleges face a monumental task in striving for that balance of educational experiences potentially most valuable for individuals and society as a whole.

FITNESS A NATIONAL ISSUE

The average educator of today has formed rather definite though individual opinions about such matters as science and mathematics, proposed "soft spots" in the curriculum, and school discipline. Often he has given limited attention to fitness, except when he finds himself sick in bed, when worry keeps him awake at night, or when his close friends remind him that his social slip is showing. At his school or college he may assume that the physical education department is responsible for the fitness of students, and he

may assume further that physical education means building muscle and stamina by engaging in strenuous exercise.

Present concepts of fitness go beyond this narrow view. First of all, they embrace the unity of man as the total organism reacts to a given life situation. Hence the phrase "total fitness," for reasons of definitive clarity, includes such interrelated attributes as: sound organic health beyond the level of mere freedom from disease or infirmity; physical strength, coordination, agility, and endurance to perform duties normally required without undue fatigue; emotional stability to meet the strains of modern living; social adaptability in accord with prevailing cultural standards; and spiritual and moral traits that improve the quality of human behavior—all bound together into a sort of body, mind, and soul composite pattern. Quite obviously these concepts of total fitness apply equally to individuals and to groups of individuals in families, in communities, in states, and in the nation as a whole.

What chain of events led to this renewed interest in fitness? A generation ago physical education in schools and colleges had for its primary objective the development of strength and endurance through vigorous exercise. But every physical educator knows that muscles grow stronger only when the performer "gives until it hurts"; and the entire system of education (academic as well as physical) gradually made fewer demands on the student's optimum level of potential achievement. The machine age helped to reduce the drudgery connected with most occupations, and life became softer and easier for the average person. Heavy apparatus disappeared from the gymnasias of schools, colleges, YMCA's, and the like, being replaced by recreational facilities that provided greater enjoyment for

participants and less hard work. Besides, informed persons had begun to ask, fitness for what? Although everyone needs a certain common denominator of fitness, specialization soon enters the picture. The football player needs fitness quite different from that necessary for the casual fisherman. The sedentary worker's requirements are unlike those of the unskilled laborer. Research has not yet answered the question of how much fitness is basic for all individuals, but medical and other authorities agree generally that most persons would benefit by increased exercise, less worry, and better social graces. Perhaps the bare fact that more than half the hospital beds of this country are occupied by persons with mental disorders gives support to the growing need for total fitness as proclaimed by many leading physicians and educators.

The above discourse presents but a thumbnail sketch of certain events that gave rise to current interest in the problem. These events serve the purpose of example, however, and help to explain the admonitions, voiced by some educators and others, that the youth of this nation is becoming alarmingly soft and unfit as disclosed by tests of strength and agility, by increasing numbers of young people who give evidence of emotional strain, and by growing reports of juvenile delinquency.

Finally, accounts of these disturbing conditions reached the White House. President Eisenhower called the memorable President's Conference on Fitness of American Youth, held at the United States Naval Academy, Annapolis, Maryland, June 18-19, 1956. Vice President Richard M. Nixon was chairman, and 148 persons attended the conference by invitation. The conferees included national leaders in government, education, medicine, recreation, public health, sports,

civic groups, and youth organizations. The assembly reached a consensus that steps should be taken without delay to launch a national program of youth fitness extending from the top levels of government to cities and towns throughout the country. The group recommended that such a movement should involve official, voluntary, and private agencies; and urged the President to appoint a council of cabinet representatives to act as a central clearing house for the program.

President Eisenhower created The President's Council on Youth Fitness by Executive Order on July 16, 1956, and included in its membership: Vice President Richard M. Nixon (chairman); The Secretary of Defense; The Secretary of the Interior; The Secretary of Agriculture; The Secretary of Labor; and The Secretary of Health, Education, and Welfare, with Dr. Shane MacCarthy as Executive Director.¹ The council chose for its slogan, "Youth Fitness is National Fitness."

The Council serves as a policy-making body and, through its executive director and other communications media, has carried the message of fitness to professional and lay groups in all parts of the country. One basic policy deals with encouragement and stimulation for state and local organizations to assume the initiative in promoting fitness through existing agencies. The Federal Government exercises no control over these state and local programs, and provides no financial support for them. The Council acts as

¹ In recent weeks Vice President Nixon has been replaced as council chairman by The Secretary of the Interior, Mr. Fred Seaton, owing to increasing duties assigned the Vice President. Mr. Seaton was selected because he represents the executive head of the Department of Government which administers the vast resources of National Parks and other facilities so essential to youth fitness.

the President's official link with The President's Citizens Advisory Committee on Fitness of American Youth, which will be described later.

Within the past eighteen months several professional associations, together with state and community groups, have held fitness conferences attended by hundreds of people. Perhaps a brief report of one conference may help to explain the general scope and significance of all.

From September 12 to 15, 1956, The American Association for Health, Physical Education, and Recreation (a Department of the National Education Association) held such a conference in Washington, D. C. One hundred invited delegates chose for their theme, "Fitness for Youth." This group spelled out the meaning of fitness in broad terms. They said:

Fitness is that state which characterizes the degree to which the person is able to function. Fitness is an individual matter. It implies the ability of each person to live most effectively within his potentialities. Ability to function depends upon the physical, mental, social, and spiritual components of fitness, all of which are related to each other and are mutually interdependent.²

The delegates went further in describing the debt owed by each person to himself and to the welfare of society by explaining that he should possess:

1. Optimum organic health consistent with heredity and the application of present health knowledge;
2. Sufficient coordination, strength, and vitality to meet emergencies as well as the requirements of daily living;
3. Emotional stability to meet the stresses and strains of modern life;
4. Social consciousness and adaptability with respect to the requirements of group living;
5. Sufficient knowledge and insight to make suitable decisions and arrive at feasible solutions to problems;

² Quoted from the conference report.

6. Attitudes, values, and skills which stimulate satisfactory participation in a free range of daily activities;

7. Spiritual and moral qualities which contribute the fullest measure of living in a democratic society.³

The above seven items and the implications thereof suggest an excellent foundation for use by individual schools, school systems, state education departments, and colleges in preparing curriculum guides for the implementation of this important program.

Many states and school districts have moved forward in promoting fitness through conferences, the issuance of guides, the preparation of fitness tests, and in other ways. Notable examples of states and a city in which work in this direction has been done or is in process are: California, Connecticut, Illinois, New York, and Kansas City (Missouri).

Additional and noteworthy projects include: fitness standards prepared by the Boys' Clubs of America; the bulletin on fitness and recreation published by The American Recreation Society; and an extensive research study on physical fitness standards being pursued by the American Association for Health, Physical Education, and Recreation. Space does not permit elaboration on this subject.

On September 9 and 10, 1957, The President's Citizens Advisory Committee on Fitness of American Youth held its First Annual Meeting at the United States Military Academy, West Point, New York. As noted earlier, this committee serves as the President's official link with The President's Council on Youth Fitness, composed of cabinet representatives. Several council members attended the West Point meeting. The President's message on this occasion read:

³ *Ibid.*

The demands of this age put great emphasis on the preparation of the youth of America, in body, mind and spirit. I can think of no more important subject to merit the attention of our Government and all citizens of the land.

As this subject is discussed by leaders assembled at West Point, I am sure that effective progress will be advanced for the strength of the national community.⁴

Vice President Richard M. Nixon served as titular head of the conference, with Mr. Carter Burgess, President of TWA, acting as chairman. The Committee consists of 121 members, invited by the President, and plans to meet annually to discuss ways and means of promoting fitness among all American youth. Members of the Committee represent many fields: athletic, civic, commerce, education, foundations, industry, labor, law enforcement, medicine, press, radio, television, public health, public relations, recreation and parks, religion, veteran, and youth.

Through group discussions and interchange of ideas, the committee directed its attention to such subjects as: leadership for youth fitness; facilities and programs; community resources; research; and telling the youth fitness story. The conference report contains a wealth of information and suggestions for use by schools and other organizations in the initiation or development of youth fitness programs.

EDUCATION A VITAL FACTOR IN FITNESS

The role of education in this great movement seems eminently clear. No other organization has such rich and varied resources as education. Among its more important resources are: expert leadership in all aspects of fitness; an abundance of facilities and equipment;

⁴ Quoted from official program.

an organized and broad program of activity experiences; demonstrated ability to cooperate with out-of-school groups such as medical and dental advisers, public health authorities, recreation commissions, and park departments; experience in marshaling community forces to promote the general welfare; and most significant of all a "captive audience."

One can anticipate all sorts of questions being raised and reasons given to justify the school's position in avoiding this important issue. Some persons will ask, How can we add another program to a curriculum already bursting at the seams? Of course this is not another program; it involves primarily, a realignment of emphasis in current programs at points best suited to fulfill objectives proposed by competent educators for a half-century. Others will raise the corollary question, How can we find time to include fitness in the curriculum? The answer appears obvious that the most valuable asset in schools concerns the students themselves, their present and future health and welfare, the attitudes and skills they develop toward optimum living as adjusted individuals and respected citizens. Still others will say, Why not leave this task to the physical education department, which already has fitness as one of its goals? To be sure, physical education must accept a substantial measure of responsibility in developing strength and vigor, and in utilizing the medium of large-muscle activity to alleviate emotional strain and to cultivate habits of improved social conduct. But physical education cannot do the job alone; total fitness in schools is everybody's business. Another group may comment, Since the schools often are criticized for usurping authority allegedly belonging to the home or to another community organization, why not avoid this criticism by

leaving fitness to these groups? Perhaps one answer is that while all sorts of agencies must cooperate in this worthy venture, education represents the best focal point from which to guide the program and to enlist the help of other organizations.

ORGANIZATION FOR FITNESS IN SCHOOLS AND COLLEGES

Solution to the problem of fitness in schools and colleges rests heavily upon persons in charge of curriculum development. The task is neither easy nor particularly complicated. Every teacher, every guidance counselor, and every administrator has a role to play. Most curriculum personnel with imagination and with the best interests of students in mind will reap abundant satisfaction from viewing lives enriched by a sound program of total fitness.

Just how can a school or college proceed with the establishment of a fitness program? Basically, the plan involves a broadly conceived group of planned activities, the cooperative efforts of all school personnel, and the effective utilization of community resources. Thus curriculum directors would seem to represent the educational hub around which the program wheel revolves, with active support given by departments or teachers, guidance and other services, and administration.

Keeping in mind that the issue deals with total fitness, school officials need to plan suitable experiences for youth within the entire curriculum. Goals must be set, activities planned, methodology considered, administrative procedures established, and evaluation standards applied throughout the entire enterprise.

Much depends upon the type of school or college organization. Elementary schools employ a variety of organiza-

tional patterns: by subjects, by broad fields, by areas-of-living,⁵ and by the emerging curriculum. Most secondary schools continue to organize the curriculum by departments and subjects, although the core program or broad-areas approach gradually gains favor. Colleges maintain departments and subjects, with an increasing number of these institutions offering general education for the whole student body as a foundation for specialization.

Notwithstanding the kind of organization used, total fitness runs the gamut of educational experiences and challenges the attention of many experts. Perhaps a few random examples may help to clarify this statement. Most persons would agree that physical educators must assume a major role in building neuromuscular strength, coordination, agility, and endurance. Health educators, science teachers, home economists, and others have responsibilities for assisting youth with matters of healthful living. Guidance counselors deal with emotional and social problems among so-called "normal" youth as well as help the disturbed and maladjusted. Physics teachers often can allay unnecessary emotional fears through explanations of phenomena associated

with guided missiles and satellites. Administrators contribute their share by articulating school and community resources both physical and personal—swimming pools, bowling alleys, parks, playgrounds, libraries; recreation personnel in commissions and among religious groups, policemen and firemen, social workers, medical and dental authorities, and civil-defense officials. Indeed, few if any staff members will find themselves without essential duties to perform in a program of total fitness that exemplifies sound organization and intelligent direction.

In conclusion, and in tying this discussion together, one might make a few safe observations and predictions. Youth constitutes the most valuable resource of the nation. The central focus of attention in education is the individual student, and the opportunity to instill in him ideals of and enthusiasm for attainment judged worthy by society. Education cannot meet a great challenge with penurious and haphazard programs. Fitness may spell the difference between success and mediocrity or failure among the youth of today and the citizens of tomorrow, including the mathematicians and scientists. Good fitness programs can help to eliminate the alleged "soft spots" that have crept into the curriculum. And the youth with fitness of body and mind seldom winds up in the principal's or dean's office or in juvenile court as a case for disciplinary action.

⁵ Hollis L. Caswell and Arthur W. Foshay, *Education in the Elementary School*, Third Edition (American Book Company, New York, 1957), p. 262. In discussing the areas-of-living curriculum these authors write, "Areas frequently employed are maintaining health, making a home, performing civic responsibilities, recreation, making a living, and getting an education."

Education and the Foundations of Liberty*

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IN 1913 James B. Bury published a book entitled *A History of Freedom of Thought*. In his last chapter, after having told the story of the long struggle of Western man for the liberation of the human mind, this eminent English historian and philosopher expressed the optimism of the time in the following words: "The struggle of reason against authority has ended in what appears now to be a decisive and permanent victory for liberty. In the most civilized and progressive countries, freedom of discussion is recognized as a fundamental principle." This statement by a wise and learned man dramatizes the gulf that separates the present generation from the opening years of the twentieth century. Who today would venture to say that the struggle for "freedom of discussion" has ended in triumph? Indeed, many voices have been heard during the last four decades proclaiming the end of the era of liberalism and the rise of some form of Caesarism.

Bury, however, after registering the optimism of the age, being a good historian, revealed a remarkable prescience. "Yet history may suggest," he wrote, "that this prospect is not assured." And then he asked, "Can we be certain that

there may not come a great set-back?" Reviewing the past and recalling the recurrent ages of darkness, he continued, "Is it not conceivable that something of the same kind may occur again? That some new force, emerging from the unknown, may surprise the world and cause a similar set-back?" With this he engaged in the following speculation: "It is by no means inconceivable that in lands where opinion is now free coercion might be introduced. If a revolutionary social movement prevailed, led by men inspired by faith in formulas (like the men of the French Revolution) and resolved to impose their creed, experience shows that coercion would almost inevitably be resorted to."

The year after the publication of Bury's book the catastrophe of the First World War swept over the "most civilized and progressive countries" of the earth and weakened the moral supports of liberty. And out of the catastrophe emerged the twin despotisms of Bolshevism and Fascism with their totalitarian doctrines and barbarous deeds. It is difficult for us to realize that the generation attending our colleges in the first decade and a half of this century never heard the words "Bolshevism" and "Fascism" mentioned in their classes in history and social philosophy. In fact the words "totalitarian" and "totalitarianism" first appeared in Webster's unabridged dic-

* This is the third in the series of lectures on "Education for a Society of Free Men in the Technological Era" delivered by Dr. Counts in Brazil in 1957.

tionary in 1934. The totalitarian scourge brought the Second World War, and today in its Bolshevik or Communist variant it holds in bondage one-third of the human race, penetrates every society on the planet, and seeks to destroy by any and all means the spirit of freedom everywhere. And in the United States, the "land of the free," as we are fond of calling it, we must be perpetually on the alert lest we fall victim to some native form of totalitarianism fraudulently carrying the banners of patriotism and presenting itself as the only loyal defender of "the American way of life." The seeds of this bogus brand of love of country have already sprouted here and there in our soil, as well as in the soil of other free lands. The prophetic speculation of Bury has been filled to the letter. Men "inspired by faith in formulas" have appeared on all continents.

We in America constitute the most powerful bastion of freedom in the world. If we should falter or grow weary in its practice and defense, the cause of liberty might well be lost throughout the earth—and the earth is getting smaller and smaller by the minute. This must be a sobering thought to free men everywhere. But how well are we equipped to discharge the awesome responsibilities which history has placed firmly on our shoulders and from which we simply cannot escape by the adoption of the so-called "Bricker amendment," by withdrawal from the United Nations, by transporting ourselves to another planet, or by any other magic formula? We must realize clearly that the destinies of all free nations are inextricably linked together.

It is in this realm of the fate of human freedom that one of the foremost tasks of the schools, colleges, universities, and all agencies of enlightenment is found.

As a people we must achieve an understanding of the foundations of liberty surpassing in both depth and scope that of any earlier generation, not excluding the generation of the founding fathers of the Republic. The rise of demagoguery in these latter years and the attendant indifference to the preservation of the basic rights of the individual constitute a measure of the deficiency of our understanding. Many of us apparently are unable to grasp the dimensions of the dilemma confronting us in our search for national security in a free society. The plain fact is that a large fraction of our people either do not understand the nature of liberty or do not care what happens to it. If we fail to see that the end desired is really security for liberty now and in the future, the thing we profess to covet most—our heritage of freedom—may itself be lost. We must realize that tyranny, like liberty, "broadens down from precedent to precedent."

A recent study of the American public mind in the realm of civil liberties by trained social scientists reveals the magnitude of the educational task before us. It also reveals a widespread condition of ignorance, confusion, and unconcern with respect to the very essence of a free society. When asked what they "worry about most," 80 per cent of the men and women interviewed answered solely in terms of immediate personal and family problems. Ten per cent "professed no worries about any problems." And less than 1 per cent, "by the most generous interpretation," expressed any concern over the threat of Communism or the condition of civil liberties. Thirty-one per cent thought that a socialist should not be allowed to present his ideas in a public address, 35 per cent that a book written by him on socialism should be removed from the public library, and 84

per cent that he should not be allowed to teach in college or university. Twenty-one per cent expressed the opinion that "a man whose loyalty has been questioned before a Congressional committee, but who swears under oath he has never been a Communist," should not be allowed to speak in the community. Twenty-two per cent would "fire" such a person from a high school teaching post, 18 per cent from work in a defense plant, and 11 per cent from clerking in a store. Moreover, many of our citizens seem unable to distinguish Communism from democratic socialism, or even from the principles of liberalism and the ethical teachings of the Judeo-Christian faith. This situation is made to order for the demagogue, the internal foe of free society since ancient times. I wonder if the situation in Brazil is any different.

In this "time of troubles" and this "time of promise" we should inquire deeply into the supports of liberty. Such supports are both tangible and intangible, the two being closely interwoven. The former are well-known and have received much attention in our generation, while the latter have been all too much neglected. Consequently, I shall give most of my attention in this lecture to the intangible supports of liberty. Also, it is in this realm that education must play its major role. And the emphasis will be placed on political liberty, for as Malinowsky warns us in his *Freedom and Civilization*, "although political freedom is not the only type of freedom in culture, yet its absence destroys all other liberties."

II

Foremost among the tangible supports is the factor of power in its several overt forms. Since the ancient Greeks, the truth has been recognized that freedom is

safe only where military, economic, and political power is widely distributed and subject to the discipline of law. Thucydides, though speaking of justice rather than of liberty, observed, "We both alike know that into the discussion of human affairs the question of justice only enters where the pressure of necessity is equal, and that the powerful exact what they can and the weak grant what they must." And Aristotle a century later stated as a maxim of politics that "when the rich grow numerous or properties increase, the form of government changes into an oligarchy or a government of families." In setting up the system of checks and balances the founding fathers of our Republic were keenly aware of the relation of power to liberty. And Daniel Webster merely gave expression to the tradition of Anglo-Saxon liberalism when he said in 1820, "In the absence of military force, political power naturally and necessarily goes into the hands which hold the property."

Perhaps the most widely quoted statement concerning the role of power in human affairs came from the pen of Lord Acton, renowned English student of the relation between freedom and power. Before the rise of the contemporary totalitarian state he said simply, "Power tends to corrupt and absolute power corrupts absolutely." Like all sweeping statements regarding the behavior of men, this statement of course requires some qualification. The countless ruling classes, nations, and races of history have not been equally corrupted by the possession of vast temporal power. One need only mention the contrasting policies and actions in our time of British imperialism, on the one side, and Nazi or Communist imperialism, on the other. Even slavery is marked by varying degrees of brutality and cruelty in different ages and cultures.

And when we turn to the impact of power on individuals, we are compelled to qualify the maxim still further. As a matter of fact, it would not be difficult to cite cases in our own American history of men who were humbled rather than corrupted by the exercise of the great power of the Presidency. On the other hand, one can easily imagine how Hitler or Stalin would have responded to the hunger strikes of Mahatma Gandhi. The latter's resort to non-violent opposition was successful only because of the humane impulses of the British Viceroy. Yet the citizens of a free society, if they would remain free, must ever keep their eyes fixed anxiously on the brute facts of power. They must ever be watchful lest some class, caste, sect, party or faction achieve a monopoly of military, economic, or political power. And at no time in the past was there greater need for such watchfulness than there is in the present age of industrial civilization, when the power balances are marked by rapid, continuous, and even profound change. Particularly fateful for the future of liberty are the new instruments of power created by scientific and engineering genius, notably the new weapons of warfare and the new means of communication by which the bodies of men may be destroyed, their minds molded, and their spirits coerced. Such employment of these fruits of technology distinguishes the contemporary totalitarian states from the despotisms of the past. George Orwell develops this theme to its logical conclusion in his *Nineteen Eighty-Four*.

III

Another tangible support of liberty may be found in the facts of geography. For several centuries the great oceans east and west served countries of the

New World as powerful barriers against successful aggression from Europe and Asia. In a sense George Washington was merely recognizing this condition when, in his Farewell Address in 1796, he warned against forming "permanent alliances with any portion of the foreign world" and entangling "our peace and prosperity in the toils of European ambition, rivalry, interest, humor, or caprice." A little more than a generation later Alexis de Tocqueville, early in his American visit in 1831, directed his eyes toward the geographical factor. Coming with a strong aristocratic bias against theories of democracy and popular rule, he gradually tempered his views in the light of his observations. He had been in America only a few months when he set down in his notes ten "causes" for the relative success of our democracy. The second of these "causes" was "geographical position—no neighbors." Today the oceans, as Tocqueville saw them, are gone. And the security which they provided and which is so essential to liberty is gone too. Some students of English history have likewise traced the development of the Anglo-Saxon tradition of political freedom to the natural barrier of the Channel.

There are other tangible supports of liberty which deserve mention. High among them would be economic plenty and security, which David Potter, an American historian, has analyzed in a recent book. Also there is the phenomenon of the voluntary association which has long been characteristic of American life, which so astonished Tocqueville, and which insures a wide distribution of power under the rule of law. And there are others. But the emphasis in the present lecture is placed on the intangible supports of liberty—supports which are basic to its practice and survival, which

at the same time are little understood or appreciated, and which confront education with its major problems and tasks in this realm. Not a few persons appear to believe that freedom can be transported from one society to another by the shipment of its outward forms.

IV

The tangible and intangible supports of liberty are brought together in the rule of law, which, according to Sir Ernest Barker, is "the foundation of foundations" of the Western political tradition. Without it the history of Europe would have little political significance. And this tradition assumes its most fundamental expression in the constitution, the "law of laws," the law under which laws are made and judged, the law which governs the governors, whether peoples, classes, officials, or monarchs. The development of constitutionalism may be regarded as man's boldest and most imaginative attempt to bring order and stability into the conduct and administration of human affairs, and not just for a brief season, but for generations and centuries. Charles A. Beard, a renowned student of our federal constitution, once expressed the view that "constitutionalism represents the highest type of government."

Statute laws and written constitutions may be regarded as tangible supports of liberty, but laws and constitutions do not enforce themselves. Why do men obey the laws, why do powerful economic groups submit to the removal of their privileges by legal means, why do the heads of government accept the verdict of the polls, and why do great army commanders fresh from victory on the battlefield abide by the principle of the subordination of the military to the civil authority in accordance with the consti-

tution? It is in this realm that the intangible supports of liberty play their indispensable role. It is in this realm too that the economic and military determinists have made their most grievous errors. The more fanatical followers of Karl Marx, for example, have assumed that all so-called "capitalist" societies are precisely alike in their fundamentals and are destined to follow the same course into the future. They forget that Marx himself repudiated this doctrine in 1872.

The issue may be sharpened by a reference to the history of constitutionalism which dates from the last quarter of the eighteenth century. During the century and a half following 1776 and 1789, says Walton H. Hamilton, professor of law at Yale University, "a count of instruments in which peoples have embodied their faith runs into the hundreds." Among these "instruments" was the famous Weimar Constitution of the German Second Reich, regarded by many students as one of the best constitutions ever written. Yet it endured but fourteen years. And of the hundreds to which Hamilton refers only a handful have actually survived the test of time and circumstance. Many lasted only a few years or decades. It is the unwritten codes of responsibility, loyalty, self-reliance, and moral courage living in the hearts of individual men and women which seem to make the difference.

V

The subject therefore takes us behind and beneath the laws, to the very character and genius of a people, to traditions, habits, loyalties, ideals, and values—all intangibles which are as real as guns, lands, factories, and parliaments. A generation ago Lord Balfour, English statesman and philosopher, summarized most succinctly these intangible supports of the British

Constitution, a constitution that was never written or adopted at any particular time. "Could it long survive the shocks of revolutionary and counter-revolutionary violence?" he asked himself, and then proceeded to answer, "I know not. The experiment has never been tried." But in the following words he prescribed the conditions of survival:

It matters little what other gifts a people may possess if they are wanting in those which, from this point of view, are of most importance. If, for example, they have no capacity for grading their loyalties as well as for being moved by them; if they have no natural inclination to liberty and no natural respect for law; if they lack good humour and tolerate foul play; if they know not how to compromise or when; if they have not that distrust of extreme conclusions which is sometimes mis-described as want of logic; if corruption does not repel them; and if their divisions tend to be either too numerous or too profound, the successful working of British institutions may be difficult or impossible.

This remarkable statement deserves far more elaboration than is possible here, particularly since the British people answered Balfour's query in the affirmative when they accepted the victory of the Labor Party in August, 1945. But high among the priorities is a body of common loyalties and conceptions of the general welfare which may be capable of holding the "divisions" in peaceful and orderly bounds. This note was stressed more than two centuries ago by Montesquieu. Recognizing three forms of government among men—despotic, aristocratic, and republican—he argued that the distinguishing mark of the first is fear, of the second, honor, and of the third, virtue. By "virtue" he meant "love of the laws of our country," a love which "requires a constant preference of public to private interest." And since virtue in-

volves "self-renunciation," which is "ever arduous and painful," it "is in a republican government that the whole power of education is required." Political liberty therefore, if it is to endure through the generations, cannot mean every man for himself and for the advancement of his narrow personal interests. Nor can it mean every class, group, association, or party for itself. The maintenance of a regime of individual liberty is thus a wide social undertaking. It cannot be a regime under which the citizen is relieved of responsibility and freed from all restraints not imposed by law or necessity. And "preference of public to private welfare" requires, not the maintenance of things as they are, but a deep concern for the eradication of injustice, the achievement of equal opportunity for all, and the removal of everything that is mean and ugly in the common life. As Carl Becker, an American student of the founding of the Republic, has eloquently said, every right or freedom carries with itself a corresponding responsibility.

It is well to recall the wise words of Lord Moulton, an English student of jurisprudence, about "obedience to the unenforceable" uttered more than a generation ago. Between "the domain of Positive Law" and "the domain of Free Choice," he said, there lies "the domain of Obedience to the Unenforceable" in which conscience rules. In his view "obedience to the unenforceable" constitutes the moral foundation of a good society. And this applies not only in the field of politics and citizenship, but also in every sphere of life—in the family, in the church, in industry, in the voluntary association, and in all human and social relationships. The power of law is clearly limited. It can scarcely be expected to make good citizens in a free society or

enforce itself, but good citizens are absolutely essential to both the making and the administration of good laws. Love of political liberty, and even love of country, cannot be compelled by legislation. And the same may be said of a sense of fairness, a spirit of tolerance of differences, an abhorrence of injustice, an acceptance of majority rule, a devotion to the Bill of Rights, an experimental and inquiring mind, and a love of one's neighbor. These great values of a free society can only be incorporated into the character of the individual through the processes of nurture and education. And this end can be achieved, not by encouraging children to pursue their own immediate interests, but by organizing an educational program deliberately and carefully designed for the purpose.

VI

Yet another intangible support of liberty is knowledge and understanding on the part of the citizen of the nature of man and of the world and age in which he lives. The dependence of free institutions on popular enlightenment has been recognized by all the great leaders and spokesmen of democracy since ancient times. But few have seen this relationship more clearly than a humble and untutored New England farmer at the close of the eighteenth century. This man, William Manning by name, completed a manuscript in 1798 entitled *The Key of Liberty* in which he endeavored to show "the Causes why a free government has Always Failed, and a Remedy against it." In his opening paragraph the author confesses candidly his limitations for undertaking such a formidable task: "I am not a Man of Learning my selfe for I neaver had the advantage of six months schooling in my life. I am no travelor for I neaver was 50 Miles from where I was

born in no direction, & I am no grate reader of antiant history for I always followed hard labor for a living." Although his grammar was bad and his spelling worse, William Manning knew his way about in the complex field of social forces. After giving "A General Description of the Causes that Ruen Republicks," he concludes that "Learning & Knowledg is essential to the preservation of Libberty and unless we have more of it amongue us we Cannot Seperate our Libbertyes Long." He then proceeds to outline the elements of "Knowledge nesecary for a freeman."

Although knowledge and understanding are not the only intangible supports of liberty, they are crucial. It seems quite likely today that those citizens of countries that had enjoyed a measure of freedom and then passed under the yoke of dictatorship did not know what they were doing. Moreover, if knowledge and understanding were necessary in Manning's time, how much more necessary they are today! Here without doubt may be found one of the most fundamental threats to the survival of liberty today and tomorrow. Science and technology, as I have said before, have created a society so dynamic in its movements, so mighty in its energies, so wide in its sweep, and so complex in its operations that one is entitled to wonder whether its control may not be beyond the capacity of the ordinary citizen. It is just possible that here is the "Achilles' heel" of free society in the present age and in the fabulous age which lies ahead. Let us recall in this connection the striking conclusion of R. J. Forbes that, even after the opening of the age of electronics and atomic energy, "we have picked up but a few pebbles on the shores of a great ocean that still remains to be explored." Clearly, if the individual is to acquire the

"knowledge necessary for a freeman" in the coming epoch, he must acquire a thirst for such knowledge. This thirst is another of the intangible supports of liberty. Unfortunately it is not a natural and universal possession of man. On the contrary it must be acquired through the twin processes of tuition and learning.

As liberty has its intangible supports, so it has its intangible destroyers. And an awareness of these intangible destroyers constitutes in itself one of the essential intangible supports of human freedom. This leads to an examination of the "totalitarian mind," whose elements are always present in some measure in the citizens of a free society. The true totalitarian regards as right whatever advances, or whatever he thinks advances, his cause. He thus subordinates means to ends, repudiates the idea of objective truth, and is prepared to falsify history and events in the interest of victory. He scorns the idea of human dignity and treats without mercy all who oppose him, whether individuals, classes, or races. He refuses to tolerate differences, and

regards those who are not with him as enemies to be destroyed. He glorifies the role of violence in history, employs the language of violence and hatred, and obeys the law only when he is weak. He is certain of the rightness of his acts and the grandeur of his mission. He subordinates everything to the capture of power. And on capturing power he outlaws all the freedoms of a democratic society, even outlawing the freedom of silence. He seeks to control all agencies and processes for the molding of the mind and rejects completely the conception of the higher law, the law above the state, the right of conscience. He is God. But he performs all of his acts in the name of the welfare of some class, race, or people whom he never consults. The follower surrenders his individual liberties and gives himself completely to the will of the leader. And all the while he believes himself to be engaged in a great crusade for some great good. A free society must be on guard against the spread of this mentality, an understanding of which should be a major object of education.

The Idea and Practice of Teacher Certification in the United States

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PREFATORY NOTE

CURRENT interest in teacher certification is high. Critics of the public schools and of teacher education tend to attack existing certification arrangements on suspicion that they have been cooked up by professional educators in a self-serving spirit. Educators are also dissatisfied, though naturally on different grounds. The arguments that take place are not always based on sound information and thorough analysis.

Dr. von Schlichten's two articles—of which this is the first—should, therefore, prove useful. His account of how existing certification practices have evolved provides a valuable perspective. His probing of the issues involved calls attention to considerations that must, clearly, be weighed.

The articles are based on the author's doctoral project at Teachers College, "A Study in Teacher Certification: The Story of the Five-Year Requirement in New York State." Dr. von Schlichten, who was Assistant Professor of Psychology at Union College when he received his Ed.D. in 1956, had intended to prepare them himself. When his sudden and premature death made that impossible, I was glad—for many reasons—to undertake the task. What follows, however, is almost entirely as Dr. von Schlichten wrote it. The reader should, therefore, remember that statements as to the situation "now" or "at present" strictly refer to what the author was able to discuss two or three years ago. No substantial changes in the picture are, however, believed to have occurred since then.

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WHENEVER communities establish schools—specialized arrangements for the education of the young—there emerges a specialized class of persons to perform the function of teaching. Inevitably, too, there develops among those who establish, foster, and support the schools a concern for the qualifications of their teachers. Throughout the history of education that concern has been translated into legislation and regulations, prescriptions and restrictions, resulting in the formal procedures once known as allowing or licensing and now generally spoken of in the United States as certification. Of course neither the ideas concerning certification nor the practices currently engaged in under that rubric have emerged full-blown in our time. The present discussion will therefore consider the general subject of certification.

THE IDEA OF CERTIFICATION

Teacher certification as now practiced in the United States has been defined as "the act of designating persons whom public boards of education may legally employ as teachers in public schools and of issuing teaching certificates to these qualified persons."¹ It would seem ob-

¹ Carter V. Good (ed.), *Dictionary of Education* (New York, McGraw-Hill Book Company, Inc., 1945), p. 63.

vious that certification requirements should: (1) be relevant to the purposes of education; (2) recognize the actual requirements of the positions for which they approve people; (3) recognize the competencies which it is felt necessary or desirable that the teacher have; and (4) take into account the actual preparation which it is possible to give candidates.

Certification requirements should be relevant to the purposes of education. This would seem to be a self-evident proposition. It follows, then, that the more clearly fixed the purposes of education, the greater the likelihood that the qualifications of teachers can be clearly established. When we survey the contemporary American educational scene, however, we are forced to conclude that our purposes are far from clear.

At present, public education is the subject of criticism from many quarters. After analyzing much of this contemporary criticism, Woodring concludes that, in order to improve the schools, first, we must find more good potential teachers and, second, "we must decide just what we want the schools to accomplish."

Finding better teachers and preparing them more adequately is in part the responsibility of the teachers colleges, but the type of preparation will be dependent upon our decisions about what is to be expected of the schools. These decisions have not been made.²

If this is true, then the establishment of certification standards must necessarily be more difficult.

Certification requirements should recognize the actual requirements of the positions for which they approve people. This is not to say that requirements can

be established only on the basis of job analysis techniques, for such an approach alone would tend toward sterility. It does imply that data from job analyses ought to be taken into consideration. The teacher is, says Kinney, (1) a director of learning, (2) a counselor and guidance worker, (3) a mediator of culture, (4) an effective liaison between school and community, (5) a member of the profession.³

Whatever the broad categories or the specifics of the duties of a teacher may be, the point is simply that certification procedures which presume to select teachers ought to take into consideration the total requirements of the positions they aim to fill.

Certification requirements should recognize the competencies which it is felt necessary or desirable that the teacher have. There is a general assumption that the successful teacher possesses some skills, knowledge, abilities, traits, and qualities which ought to be identifiable and measurable. On that assumption a large number of studies have been carried on over many years—studies of causes of teacher failure, analyses of pupil opinions relative to desirable teacher traits, summaries of expert opinions of practical schoolmen, investigations of characteristic differences between good and poor teachers—all designed to elicit information on desirable teacher competencies.⁴ Unfortunately, despite such serious effort it has not yet been possible to establish criteria on which to judge teacher effectiveness. In the light of this lack of reliable, usable knowledge regard-

³ Lucien B. Kinney, *Measure of the Good Teacher* (Sacramento, California Teachers Association, 1952), 28 pp.

⁴ See, for example, A. S. Barr, "Teacher Competencies," *Encyclopedia of Educational Research* (New York, The Macmillan Company, 1950), pp. 1446-54.

² Paul Woodring, *Let's Talk Sense About Our Schools* (New York, McGraw-Hill Book Company, Inc., 1953), p. 199.

ing teacher competencies, one can only conclude that much of our present teacher certification (and selection, training, and evaluation as well) must be a groping in relative darkness.

Certification requirements should take into account the actual preparation which it is possible to give candidates. A simple illustration will clarify the point. A half century ago any demand that a teacher have a thorough knowledge of the child or the adolescent would have been absurd practically, no matter how desirable theoretically. Now, considering developments in those fields, it would be equally absurd to fail to require such understanding as a condition of employment. The principle of gearing certification requirements to what is possible by way of training may be illustrated in a number of subject-matter as well as professional areas—in measurement, use of community resources, guidance and internship, to cite a few examples. At present this principle probably has the most relevance for the professional requirements to be demanded of secondary teachers, for it is in respect to their preparation that one is most likely to encounter disparaging attitudes toward professional preparation.

The Question of Bases

A perennial question regarding certification is, What shall be the bases of certification? It will be shown in the latter part of this discussion that we have moved historically from licensure based on subjective judgments of the candidate's qualifications, through local, county, and state written examinations, to state certification based largely on courses and degrees, via transcript. And still the problem of adequate bases persists.

The discussion of factors that ought

to be taken into account in formulating requirements offers fruitful clues to new bases, if it can indeed be demonstrated that the present bases are inadequate. Armstrong leans in this direction when he says:

Until the job of assigning functions and identifying competences is done, we shall operate on the assumption that a certain number of credit hours in a subject is evidence of competence in that area, and that the graduate of an accredited institution should be licensed to teach. It is my belief that the teaching profession will require at some time in the future some further evidence of competence in addition to graduation from an institution with an approved program of teacher education.⁵

Two Conclusions

From the foregoing discussion of purposes, relevant factors and bases, many conclusions regarding certification might be drawn. Two will be discussed briefly. First, it seems evident that certification requirements, once established, can never be considered permanent. As new goals for education are established or old ones dropped, as techniques for identifying and measuring teachers' competencies are developed, as new insights into teacher education are gained, as teaching itself moves increasingly onto the professional level, these developments must inevitably reflect themselves in changes in certification standards.

Second, it must also be evident that certification is not an isolated phenomenon. It is patent, for instance, that certification, teacher education, and ultimately accreditation for teacher educa-

⁵ W. Earl Armstrong, "Teacher Certification and the Professionalization of Teaching," *The Certification of Teachers*, Official Report of the Miami Beach Conference of the National Commission on Teacher Education and Professional Standards (Washington, National Education Association, 1953), pp. 52-53.

tion are part of the same cloth. It would be a nice exercise to attempt to determine what the precise relationship between certification and teacher education really is. "The requirements for a credential are in fact," says Simpson, "a legal statement of the minimum requirements of the curriculum for the education of teachers."⁶ On the other hand, developments in teacher education lead to developments in certification requirements also. Quite possibly the relationship is reciprocal.

Accreditation, teacher education, and certification are simply parts of what should be a unified process. Beyond that, certification is also related to supervision and in-service training. If, for example, schools are able to give a new teacher a large amount of professional supervision in his initial position, the entrance requirements for that position can be quite different from what they are if the beginner is to be thrown entirely on his own at the very outset.

Certification Standards and Teacher Supply

There are divergent points of view concerning the relationship of certification standards to teacher supply. The problem of an adequate supply of teachers is, and for decades has been, a thorny one, marked by alternating cycles of feast and famine. The problem is complicated by the fact that we are dealing with a question of effective rather than potential supply, it being well known that many more people prepare for teaching than ever enter the field, many remain in the field for only short periods, and still others could move into various teaching fields with relative ease if they

were so minded. Our question narrows itself, then, to this: What relationship, if any, is there between effective teacher supply and certification standards?

Here it need only be reported that four distinguishable and conflicting positions have been taken respecting this question: (1) that high standards increase shortages;⁷ (2) that they reduce them;⁸ (3) that they have no effect one way or the other;⁹ and (4) that on available evidence no one can be sure what the truth is.¹⁰

Formulation of Certification Standards

The final question to be considered is this: Who shall be responsible for formulating certification standards? In the United States, standards are drawn up by each of the forty-eight states. There appears to be no significant quarrel with that arrangement. Granted its validity, a further question arises: Who specifically, within the several states, shall participate in the determination of the requirements which are to be adopted and enforced? Stinnett holds this to be a fundamental issue, particularly because he feels that many people believe that the certification process is dominated by "educationists," by a "group of monopolists" who manipulate standards in the interests not of the children and the public, but of the "hier-

⁷ See J. Bracken Lee, "Certification Standards Should Be Lowered," *Utah Educational Review*, September, 1954, pp. 20, 28.

⁸ See American Association of School Administrators, *The Expanding Role of Education*, Twenty-sixth Yearbook (Washington: American Association of School Administrators, 1948), p. 232.

⁹ See Armen A. Alchian, "An Economist Looks at Secondary Education," *California Journal of Secondary Education*, January, 1954, pp. 35-38.

¹⁰ See Francis S. Chase, "The Improvement of Teacher Certification—Next Steps," *The Certification of Teachers*, op. cit., p. 81.

⁶ Roy E. Simpson, "The State Superintendent Looks at Teacher Education," *California Schools*, April, 1954, p. 165.

archy in education."¹¹ Whether or not these charges are true, it seems imperative, especially in the light of our commitment to democracy, that the principle be adopted that those who are affected by and have a concern for the regulations which are established should have a definite voice in their formulation.

It is heartening to note that there is a growing movement in the direction of implementing the principle which has just been enunciated. There are at present forty-seven commissions on teacher education and professional standards (TEPS) set up in forty-three states, with two in South Carolina, two in the District of Columbia, and one in Hawaii, which "represent the interests of the teaching profession itself, and generally they have been given an important role in the democratic process of determining certification requirements."¹² In addition, in thirty-six states there are state councils on teacher education, composed principally of representatives of all teacher education agencies in the state. While their central concern is teacher education, this is so intimately related to certification that they cannot avoid dealing with questions in the latter field.¹³ Many states also have advisory committees which work directly with state directors of teacher education and certification. For example, since 1949 California has had such a state-wide committee, appointed by the Superintendent of Public Instruction, which appears to be particularly effective.¹⁴

Jaggers suggests that in the several

states the following groups should be involved in the formulation of teacher-education and certification programs: the organized profession through its commissions on teacher education and professional standards, the state department of education, teacher-education institutions, the advisory council, and the employers of teachers.¹⁵ While all of this is in the direction of democratizing the formulation of certification regulations, it should be noted, first, that all of the groups suggested by Jaggers appear to have only advisory functions in relation to the state director of certification, and, second, that the whole complex is still within the circle of professional educators. Fuller implementation of the democratic principle indicates (1) that the suggested advisory groups should be granted more actual legislative power, and (2) that the public at large should be given a more direct voice, possibly through such an agency as the Parent-Teacher Association.

Desirable Certification Standards

The foregoing discussion makes possible some extension of the list of characteristics of desirable certification standards presented earlier. Not only should they: (1) be relevant to the purposes of education; (2) recognize actual requirements of positions; (3) indicate essential or desirable competencies; and (4) take into account preparation possible to give candidates; they should also: (5) be specific in that they make clear to the prospective teacher just what, beyond the length of the period of study, must be done to prepare for a given position, and also give guidance to the teacher-prepar-

¹¹ T. M. Stinnett, "Teacher Certification: Current Practices and Issues," *The Certification of Teachers*, *op. cit.*, p. 9.

¹² *Ibid.*, p. 10.

¹³ Sam P. Wiggins, "A Study of State Councils," *Journal of Teacher Education*, September, 1954, pp. 183-87.

¹⁴ Simpson, *op. cit.*, p. 165.

¹⁵ R. E. Jaggers, "Teacher Certification and the Professionalization of Teaching," *The Certification of Teachers*, *op. cit.*, p. 61-62.

ing agencies to insure that prospective teachers are in fact prepared for given types of positions; (6) be flexible to permit adjustment to changing conditions in the schools, experimentation in teacher education, free movement of teachers across state lines, and the like; (7) be democratically evolved so that the interests of all are reflected; and (8) be effective in that they help meet the actual needs of the schools.

In fine, desirable certification standards ought, above all, to promote rather than inhibit the securing and retention of the right kinds of teachers. There is a point beyond which certification could become so stringent, complex, bothersome, inflexible, and restrictive that it would be seriously inhibitory. Even more painful to contemplate is the possibility that an unrealistic certification process might actually facilitate the selection of precisely the wrong kinds of persons as teachers.

THE PRACTICE OF CERTIFICATION

Colonial and National Backgrounds

The original American colonies were predominantly English and Protestant in their orientation and so their institutions bore these imprints. Of all the English ideas bearing on colonial education the most significant ones were probably those concerning ecclesiastical polity.

In New York and the other colonies south of New England the Anglican Church came sooner or later to exercise great influence. Accordingly, in keeping with that church's episcopal system, teachers in these colonies taught by the grace of the Bishop of London or his designee, frequently the colonial governor. In New England, where the church polity was originally Presbyterian or Calvinist, the Christian magistracy was

equally empowered to determine who should be permitted to teach. Later, with a shift to the Congregational form of ecclesiastical organization, selection and approval of teachers moved into the hands of the selectmen or of an appointed school committee which might or might not include local clergymen.

There were, of course, many variations in colonial circumstances and practices. But it may be said in general that those who wished to teach had to gain approval of some ecclesiastical or political personage or body, were subject to continuing inspection thereby, and had tenure only by their will. Moreover, the allowing or licensing (which were the terms in contemporary use) was based on subjective judgments concerning the orthodoxy, moral character, subject-matter competence and teaching ability of the candidate. At the time of the Revolution, political loyalty became a matter to be looked into. Throughout colonial days formal educational requirements and written examinations as a means of testing candidates appear to have been unknown.

With the establishment of the new nation, responsibility for education was left, under the Constitution, to the several states which, in turn, characteristically placed responsibility for the selection, licensing, and supervision of teachers at the local level. The characteristic bases for these activities continued to be the personal judgments of local school committeemen, based on oral inquiry. New York State is generally considered to have been one of the most progressive in respect to educational matters in the early national period. Yet Alonzo Potter, who in 1841 made a study of New York's common schools,¹⁶

¹⁶ Alonzo Potter and George B. Emerson, *The School and the Schoolmaster* (New York,

presented a picture of decrepit buildings, sterile teaching methods, meager and erratic attendance, a multiplicity of minute school districts (10,796 to be exact), an endless variety of texts, defective supervision, and an incompetent corps of male teachers. "That a large proportion of common school teachers are not well qualified for their duties," he wrote, "is so generally admitted, that proof of it would be superfluous."¹⁷

In summary, concerning the licensing of teachers up to the close of the early national period, it may be said that practices which originated in the New England Colonies were continued and became dominant. Control of education resided on the lowest local levels, the town and the district. Teacher licensing was local. The bases for granting or revoking licenses were personal judgments of local school officials as to competence and character, founded on oral inquiry and oral examination. Licenses so granted were valid only in the school in which the teacher was employed. This system of licensure proved to be unsatisfactory in practice.

The Later Nineteenth Century

In the past hundred years the locus of certification has moved to the state level, and the basis of certification has become primarily a matter of meeting certain degree and course requirements. Furthermore, certification has moved from the issuance of one general teaching certificate valid in only one school, to the issuance of a great variety of differentiated certificates with state-wide validity.

These changes in certification practice

—changes in locus, bases and validity, and the growth of differentiated certificates—have been not a series of isolated events, but an integral part of, indeed largely dependent upon, a host of inter-related developments which took place in public education particularly in the nineteenth century. Those developments we must take into consideration if we would understand the changes which have occurred.

The battle for universal free public education. There was the struggle, above all, for general acceptance of the principle that education was indeed a fundamental concern of the state rather than of private, religious, or charitable interests only. There was the struggle, too, for the principle that public education should be free—entirely tax-supported—for all, as a matter of right, rather than as a matter of charity for a few stigmatized as paupers. This free, universal public education must be housed in adequate buildings; there must be improved methods of teaching and an amelioration of the harsh methods of discipline; and in addition and fundamental to all of this, there must be a corps of competently trained teachers. These were the rallying points around which the forces favorable to public education marshaled their energies.¹⁸

These forces included not only educators but certain religious and political leaders, labor groups, editors, humanitarians, and others. Sooner or later every state contributed persons to the battles that had to be fought through every state

Harper and Bros., 1842). Part I, *The School*, 264 pp., written by Alonzo Potter, D.D., Professor of Moral Philosophy in Union College, Schenectady, New York.

¹⁷ *Ibid.*, p. 236.

¹⁸ Edward H. Reisner, *The Evolution of the Common School* (New York, The Macmillan Company, 1930), pp. 286-421; also Edgar W. Knight, *Education in the United States* (New York, Ginn and Company, 1951), pp. 192-369; and R. Freeman Butts, *A Cultural History of Education* (New York, McGraw-Hill Book Company, 1947), p. 287.

legislature. They carried on through conventions, lyceum speeches, articles in journals and newspapers, memorials to legislatures—in every way they felt would promote the cause of public education.¹⁹

Two phases of the development of public education which were to exercise a special influence in certification practices were (1) the establishment of state educational systems, and (2) the emergence of specific provisions for teacher education.

Establishment of state educational systems. The movement toward state organization and state oversight of public education had its genesis in the granting of state funds to local schools. Someone on the state level had to do the consequently necessary clerical and fiscal work. In many cases this was the secretary of state, the state comptroller, or some other state official who thus served, in effect, as chief state school officer. Sometimes a special person known by one of several titles—for example, superintendent of common schools, or secretary of the state board of education—was appointed. Sometimes, too, the office would be established, then shifted or abolished, then re-created.²⁰ Since 1913, every state has had a separate chief state school officer, though the titles, salaries, methods of selection, professional competence, duties, and prestige of this officer vary tremendously in the several states.²¹

Paralleling, or more often following, the creation of the office of chief state

school officer was the development of intermediate administrative and supervisory units—city superintendencies and county, division, or intermediate district superintendencies. There also developed the device of state boards of education, with varying degrees of policy-making functions. At present there are some forty state boards, with differing forms of selection, organization, and functions.²²

Whatever the reasons for the establishment of the various policy-making, administrative, and supervisory units larger than the district and town may have been—they are manifold and the forms of organization have been and remain extremely complex—the implication for teacher certification was simply that there came into being in the nineteenth century units larger than the strictly local, which could serve as broader and perhaps more satisfactory agencies for certification. Those who were dissatisfied with the narrow, chaotic, provincial, shabbily carried out local certification practices—and such dissatisfaction with local procedures was rampant among educational reformers throughout the nineteenth and well into the twentieth century—could point to the state or intermediate units as the ones to take over certification, once those units had been established.

Emergence of specific provisions for teacher education. The development of teacher education in the nineteenth century is also intimately intertwined with significant changes in certification practice. The central role of the proper preparation of teachers was early recognized by the friends of public education; indeed for many of them the creation of specific provisions for teacher education became an intense personal crusade to which they dedicated themselves with

¹⁹ Knight, *Education in the United States*, pp. 192-236.

²⁰ Edgar W. Knight, *Fifty Years of American Education* (New York, The Ronald Press Company, 1952), pp. 305-7.

²¹ W. W. Keesecker, *State Board of Education and Chief State School Officers* (Washington: Federal Security Agency, U. S. Office of Education, 1950), Bulletin No. 12, *passim*.

²² Keesecker, *op. cit.*, p. 8 fwd.

almost religious fervor. The Herculean work of Horace Mann in establishing and then maintaining the first state normal schools in Massachusetts is illustrative.²³ In New York State, David Page literally killed himself in his work as the first principal of the first state normal school, at Albany.²⁴

Beginnings were indeed meager and feeble. Opposition was strong. Of professional instructional material there was at first virtually none. The most that many an early principal could hope to do was to give young people, many of whom had never progressed beyond common school themselves, additional preparation in the subjects which they would in turn teach in the common school. At best, these young people stayed a full year. Many of them, however, stayed but a few months and then took a school. One thing the early normal schools did do: they hewed to the line of their goal of preparing common school teachers, and in that effort they early hit on the principle of using actual schools for children to serve as model or practice schools.²⁵

The normal school idea spread slowly, first in the Northeast, then in the West, finally in the South. By the end of the nineteenth century every state had some sort of provision for teacher training, but it was not until 1910 that the last of the states had established normal schools.²⁶ Meanwhile, too, their programs increased from one to two, then to three and four years in length. In recent decades all but a handful have become degree-granting

institutions, many with graduate offerings, and now they are rapidly being transformed into multi-purpose state colleges.²⁷

State normal schools are only one facet, however, of the field of teacher education. The nineteenth century also witnessed the development of the Teacher Institute movement, Teachers' Reading Circles, and Teachers' Libraries, as well as the continued development of teacher training in public high schools, private high schools and academies, and private normal schools, and the growth of departments and schools of education in colleges and universities.

One aspect of teacher education, and one which is particularly relevant to secondary certification, is the role played by colleges and universities. Teacher education was designed in the first instance to improve the quality of common school instruction. Such teacher education was roughly on the secondary level; was in fact often offered by academies. Under these circumstances the colleges were not officially concerned with teacher education.

However, a number of developments generated some interest and considerable concern in regard to teacher education among the colleges in the latter half of the nineteenth century. The common schools did not necessarily stop with the teaching of the common branches, but might offer higher subjects in cases where a teacher felt capable of instructing in them. The question of how high in the instructional hierarchy the common schools ought to go became an issue. Furthermore, the public high school, either as a continuation of the common school or as a separate institution,

²³ Charles A. Harper, *A Century of Public Teacher Education* (Washington: National Education Association, 1939), pp. 20-22.

²⁴ David P. Page, *Theory and Practice of Teaching* (New York: A. S. Barnes and Burr, 1860), p. 356.

²⁵ Harper, *op. cit.*, pp. 30-33.

²⁶ Knight, *Fifty Years of Education*, pp. 227-28.

²⁷ Karl W. Bigelow, "The Passing of the Teachers College," *Teachers College Record*, May, 1957, pp. 409-17.

achieved ascendancy over the academy, particularly after the Kalamazoo decision in 1874. The normal schools were asking themselves if they did not have an obligation to prepare high school teachers.²⁸ In addition, college students going into teaching, principalships, and superintendencies were asking themselves and their alma maters if they could be supplied with some preparation for their vocations.

Accordingly, by the turn of the century some 220 colleges and universities were offering instruction in pedagogy, ranging all the way from a few lectures to full-fledged school-of-education programs, as at New York and Columbia Universities.²⁹

Such developments in teacher education, reaching into every type of collegiate institution, offered the possibility of a new base for teacher certification. That base could now be the completion of a specified amount of training, in terms of years, courses or curricula, subject matter and/or professional education, which might be demanded as a prerequisite to certification, or might be acceptable as a substitute for such existing requirements as certification examinations.

Certification practices in New York State. The common school system of New York State was inaugurated by the Act of 1812, according to which teachers were to be licensed by the town school inspectors.³⁰ A trend toward a higher locus for certification began with the Law of 1841, which created deputy (county) superintendents of schools,

gave them supplementary powers of certification, and provided that appeal relating to certification issues might be made to the state superintendent of common schools.³¹ Further changes in the same direction were made in the Law of 1843.³²

Then, in 1849, the school law recognized the significance of the founding of the state's first normal school, five years previously, by providing that the possession of a diploma from that school should be deemed evidence that the holder was "a qualified teacher."³³

In the latter half of the century the authority of the state superintendent over certification was strengthened considerably. Thus he was authorized to annul certificates "upon cause,"³⁴ to grant certificates upon examination³⁵ or upon evidence of graduation from college plus three years of teaching experience,³⁶ and to endorse, "in his discretion," certificates or normal school diplomas from other states.³⁷

By the end of the century, however—in 1900 to be precise—nearly two-thirds of the certificates were still local in origin, with those based on normal school training accounting for about one-sixth of the total and those resulting from attendance in the recently organized training classes contributing about one-seventh. State certificates, based on two years of experience and examinations (of about high-school graduate level), and

³¹ *Laws of New York*, 64th Session, 1841, Ch. 260, Sec. 36 and 40.

³² *Laws of New York*, 66th Session, 1843, Ch. 133, Sec. 1, 2, 8, 9, 10.

³³ *Laws of New York*, 72nd Session, 1849, Ch. 382, Sec. 11.

³⁴ *Laws of New York*, 87th Session, 1864, Title 1, par. 16.

³⁵ *Laws of New York*, 98th Session, 1875, Ch. 567, Sec. 15.

³⁶ *Laws of New York*, 116th Session, 1894, Ch. 556, Title I, Sec. 10.

³⁷ *Ibid.*

²⁸ Harper, *op. cit.*, pp. 129-40.

²⁹ Leigh G. Hubbell, "The Development of University Departments of Education" (unpublished doctoral dissertation, Catholic University of America, 1924), p. 2.

³⁰ "An Act for the Establishment of Common Schools," Ch. CCXLII, *Laws of New York*, 35th Session, 1812 (Albany, Printed for S. Southwick, Printer to the State, 1812), p. 496.

college-graduate licenses were very few in number.³⁸

It should be recorded, however, that the classes of local certificates had steadily increased in number, and that there had been a steady shift from oral inquiry—first to locally-prepared and finally to state-prepared but locally-administered written examinations. Moreover as the twentieth century dawned, regulations were adopted which effectively barred teachers with purely local certificates from teaching in most high schools in New York State.³⁹ However, qualified high school teachers were still eligible, without further test, to teach on the elementary school level as well.

From the illustration furnished by New York State we may conclude that the main outline of certification practice as exercised today had been sketched in by the end of the nineteenth century. The fundamental change of locus from local to higher levels had been inaugurated. The increase of validity from local to state and even interstate had been begun. The present bases—formal preparation, as measured by diplomas, degrees and courses—had likewise been initiated. Different certificates for differing functions and teaching levels (i.e., secondary, kindergarten, music) had begun to be issued. In short, by the end of the nineteenth century the foundations for certification practice as we know it today had largely been laid.

The Twentieth Century

In the twentieth century there began to appear research studies in the field of certification, studies which frequently involved the compilation and analysis of

great masses of data gathered from all of the states. From those studies one can gain some idea of the status quo, of the changes which had occurred since previous studies had been made, and very often of the author's evaluation of current practices and his ideas as to what steps ought to be taken.

The first of these national studies was done by Cubberley in 1906 for the National Society for the Scientific Study of Education.⁴⁰ Cubberley found a great deal over which to be alarmed. Only some 20 per cent of teachers had had any special training; 80 to 85 per cent had prepared by private study, had been tested by examination and experience, and had no special preparation whatsoever for teaching. The situation with regard to certification was chaotic, and the standards were often incredibly low. Cubberley cites the case of an eleven-year-old boy passing the county teacher's examination with an average of 98 per cent.⁴¹ Examinations were given frequently, in some schools every month, for a fee which he felt was "nothing more than a form of petty graft imposed on the most poorly paid of all public servants, and against which the teacher had no recourse."⁴² Furthermore, over 80 per cent of the states made no distinction between elementary and high school certificates. Of this he says:

In almost all of our states a teacher's certificate of any grade is good to teach in any part of the school system. . . . Cases not infrequently happen of a teacher teaching in a high school when the teacher herself has not had more than a year or two of high school work.⁴³

⁴⁰ Ellwood P. Cubberley, "The Certification of Teachers," *The Fifth Yearbook of the National Society for the Scientific Study of Education, Part II* (Chicago, The University of Chicago Press, 1906). 88 pp.

⁴¹ *Ibid.*, p. 39.

⁴² *Ibid.*, pp. 59-61.

⁴³ *Ibid.*, p. 42.

³⁸ *Annual Report*, State Superintendent of Instruction, 1900.

³⁹ *Annual Report*, Superintendent of Public Instruction, 1903, p. 192.

Cubberley's recommendations included the following: elimination of all local, city, and county certification; elimination of third- and fourth-grade certificates; the gradual elimination of all examinations; differentiation between the elementary and secondary levels. In short, he looked to all state certification based on educational credentials. Of particular moment is his thinking in respect to secondary certification:

It may be laid down as a safe standard that a teacher is not prepared to teach in a high school until after he has had some advanced training beyond . . . high school or normal school. . . . This practically demands that the teachers of our high schools be required to be college graduates, or to have had an equivalent education. . . . The only safe way is to impose a definite educational requirement such as graduation from college.⁴⁴

Updegraff's study published in 1911⁴⁵ furnishes convincing evidence of the trends in certification practices as of that date. Forty-seven of the forty-eight states now issued certificates on the state level; 68 per cent of all kinds of certificates granted were issued by central agencies (state officers or educational institutions).⁴⁶ As to the validity of the certificates issued, in fifteen states all except city and temporary certificates had state-wide validity; in twenty-nine states there existed dual systems of state and county validity; and in four states state-town systems.⁴⁷

Regarding differentiated certification, Updegraff's study reveals that thirty states issued one or more certificates valid

only in elementary or rural schools; ten states, certificates valid in high schools (the holder needed the certificate to teach on the secondary level, but was not necessarily limited thereby to the secondary level); and twenty-seven states, one or more special certificates authorizing the holder to teach only the branches specified—for example, drawing, music, domestic science, or kindergarten.⁴⁸

Finally, Updegraff's data disclosed a clear trend in the bases of certification away from examinations and toward the completion of courses of study. By 1911, forty-one states issued certificates based on the completion of a normal school course.⁴⁹ In thirty-nine states there also existed certificates for which graduation from college was a prerequisite. Further analysis reveals that in ten of those states no professional education was required; in ten others some college graduate certificates did, and others did not, require professional education; in the remaining nineteen states professional education was required, by way of either undergraduate or post-graduate study.⁵⁰

The trends which have been noted were halted and even seriously reversed during World War I, when, owing to a general and profound teacher shortage, many schools were closed and many persons were employed on emergency and temporary bases, almost totally regardless of qualifications. In 1918, of the entire teaching force of some 600,000 persons, 50 per cent had no special professional preparation for their work, 100,000 had less than two years' education beyond the eighth grade.⁵¹

⁴⁴ *Ibid.*, p. 59.

⁴⁵ Harlan Updegraff, *Teachers Certificates Issued Under General State Laws and Regulations*, U. S. Office of Education, 1911, Bulletin No. 18 (Washington: Government Printing Office, 1911).

⁴⁶ *Ibid.*, pp. 143, 136.

⁴⁷ *Ibid.*, pp. 154-55.

⁴⁸ *Ibid.*, pp. 156-57.

⁴⁹ *Ibid.*, p. 182.

⁵⁰ *Ibid.*, p. 172.

⁵¹ *A National Program for Education*. The National Education Association Commission Series No. 3 (Washington: National Education Association, 1918), p. 4.

Two major studies by Cook, in 1921 and in 1927,⁵² disclosed, however, that in the decade of the 1920's there was a renewal of the movement to upgrade certification standards. In regard to the bases for certification, Cook concluded from her data that, as of 1927, "prospective teachers, supervisors, and administrators now prepare for their respective vocations in higher institutions of learning almost exclusively,"⁵³ and that "the indications are that it [the examination system] will eventually be considered practicable only as an occasional substitute for systematically earned scholarship requirements."⁵⁴

Cook also revealed that between 1911 and 1926 the number of states in which power of certification had been centralized in the hands of state officials had increased from fifteen to thirty-six. Furthermore, by 1927 the tendency to limit the holder of a certificate to a specified teaching level or field was clear. To be sure, in many places the holder of a general high school certificate was allowed to teach on any level, but the same was not true in regard to holders of elementary certificates. Moreover, there was a marked tendency to limit high school certificates to particular academic fields for which they were endorsed.

Cook further noted a tendency to reduce the issuance of life certificates in favor of probationary certificates which later could be validated for as much as ten years, and a tendency to reduce or eliminate the renewal privilege in regard to the lowest grade of certificates offered

or to make the holder secure more training for renewal purposes.⁵⁵

The overarching fact of the decade of the 1930's was the great depression with its concomitant limited general employment. The effect of this on teacher supply was a serious oversupply of teachers in some fields, such as English and history, throughout the entire decade, and in most of the remaining fields until about 1936.⁵⁶ This circumstance made possible the continued raising of minimum standards and a corollary increase in requirements of formal teacher preparation. It was during the 1930's, for example, that the demand for a minimum of five years of college preparation for teachers prior to their first employment was increasingly voiced. Each state raised its certification standards in terms of its own previous position so that, while standards were generally tightened somewhat, they were still marked by tremendous diversity, considerable confusion, and notably wide variations over the nation as a whole. These were the findings of the National Survey of the Education of Teachers as of 1935.

Probably the greatest single obstacle to making teaching a profession . . . is the present chaos in certification practices. In many states certificates . . . may still be obtained by means of examinations and even in the states where they are issued on the basis of college preparation it is possible on the elementary level, with but few exceptions, for one to teach with less than a four-year period of preservice college preparation. And it is further possible for many to teach in high school without this amount of preparation. . . .

Furthermore, qualitative standards are decidedly lacking for most types of teachers

⁵² Katherine M. Cook, *State Laws and Regulations Governing Teachers Certificates*. Dept. of Interior, Bureau of Education Bulletin 1921, No. 22 (Washington: Government Printing Office, 1921), 242 pp.; and *Ibid.*, Bulletin 1927, No. 19 (Washington: U. S. Government Printing Office, 1928), 296 pp.

⁵³ Cook, *op. cit.* (1927), p. 30.

⁵⁴ *Ibid.*, p. 9.

⁵⁵ *Ibid.*, p. 28. (The consequences of this last-mentioned trend will be examined in detail in the second article of this series.)

⁵⁶ Earl W. Anderson and Reuben H. Eliasson, "Teacher Supply and Demand," *Review of Education Research*, 7:239, June, 1937.

in most states. There is little insistence, for example, that one must have specific course work in the fields of specialization one wishes to teach. The requirements with respect to courses in education and psychology, special method, and practice teaching are also inadequate.⁵⁷

By way of action the National Survey proposed that certification be restricted to specific levels and fields; that life certificates be abolished; that uniform titles be established to promote interstate reciprocity; that additional data on health, character, aptitudes, interests, test scores, and the like be required of the applicant for certification over and above college transcripts; and finally, that the number certificated at any given time be in relation to the actual demand for that particular kind of personnel.⁵⁸

Following the outbreak of World War II in Europe, economic developments in the United States and later the adoption of the draft operated to reduce the supply of teachers. One effect of this shortage which, of course, became increasingly severe after the United States itself entered the war was the granting of emergency and temporary certificates, a lowering of requirements in fact if not in theory. Nevertheless, particularly since the close of World War II, there has been a continuation, indeed a marked intensification, of the movement to upgrade certification requirements.

On the basis of the data furnished by Woellner and Wood and the National Education Association, it may be said that the following generalizations characterize the practice of teacher certification as it existed in the United States soon

after the middle of the twentieth century.⁵⁹

1. Legal authority for certification is now centralized in one state agency in practically every state, with some diffusion of authority in a few. For example, in New York State, certification authority is still shared with the city boards of education of New York City and Buffalo, and in four states, the state colleges are authorized to issue certificates directly to graduates earning the Bachelor of Science in Education degree.

2. The examination as a basis for certification is virtually extinct in practice, though in theory it is still possible to get some types of certificates in seven states via examination.

3. Educational prerequisites have superseded examinations as the chief basis for certification. Those prerequisites are being constantly increased both qualitatively and quantitatively. Some twenty-five states now require the Bachelor's degree for the lowest regular elementary certificates, and five more have set deadlines when that requirement must be met. Forty states require a Bachelor's degree for the initial secondary certificate, four require a fifth year of preparation, and in only four states are fewer than four years of collegiate preparation required. Qualitatively, virtually all states now mandate a minimum number of semester hours of professional education, and well over half of the states mandate general education.

4. The trend away from life certifi-

⁵⁷ Earle U. Rugg, *et al.*, *Teacher Education Curricula* (Vol. III of National Survey of the Education of Teachers, United States Office of Education Bulletin 1933, No. 10. Washington: Government Printing Office, 1935), p. 141.

⁵⁸ *Ibid.*, pp. 141-42, 348.

⁵⁹ Robert C. Woellner and M. Aurilla Wood, *Requirements for Certification of Teachers, Counselors, Librarians, and Administrators for Elementary Schools, Secondary Schools, and Junior Colleges*. (Chicago: University of Chicago Press, 1955); and National Education Association, *A Manual on Certification Requirements for School Personnel in the United States* (Washington: National Education Association, 1953), 172 pp. (See especially pp. 1-19).

cates continues, as does the granting of blanket certificates. It is increasingly the practice to issue certificates which are endorsed for specified levels, subjects, or fields and are valid for a specified period, rather than to issue blanket life certificates.

5. Interstate reciprocity in certification is moving forward.

6. There is still, however, a plethora of types and grades of certificates offered under confusing names.

It is evident that by mid-twentieth century great strides have been made in directions already set in the nineteenth. However, problems remain plentiful. For example, though certification is now firmly established at the state level, the problem of just who shall be involved in the formulation of requirements persists. Though interstate reciprocity is growing, the diverse body of certification laws still constitutes a maze that seriously inhibits reciprocity in both certification and the allied field of teacher education. Furthermore, disparate standards are also conducive to inequalities in the nature of the teaching force from state to state. This, too, is a matter for concern from the point of view of the national welfare.

A serious current problem concerns the adequacy of the present basis of certification. It has been shown that certification now rests on the completion of formal preparation as measured in courses and degrees, that this was one of the outcomes of the development of formal teacher education, and that the major portion of the change-over from previous bases has occurred in the twentieth century. As that change-over increased in magnitude a fundamental problem likewise increased in significance, a problem posed by this question: What, then, should be the proper quantity and quality

of formal education to be required as the basis for teacher certification?

Concern over that problem was voiced at least as early as 1906, when Cubberley made the first nation-wide study of certification. A similar concern was strongly reflected two decades later in the findings of the National Survey of the Education of Teachers. That concern was also central to the work of the Commission on Teacher Education from 1938 to 1944.⁶⁰ And now that teacher certification rests squarely and exclusively on the basis of formal education, the problem of the quantity and quality of that education continues to be ever-present, persistent and immediate. In fact, the specific question of five years of formal preparation for certain categories of teachers, with which the second article deals in some detail, may be viewed as simply one facet of that problem. Indeed, in view of the dynamic nature of our society and of our educational arrangements it is quite possible that the specifications for the proper education of teachers can never be drawn with any assurance of finality, but must constantly be reviewed and possibly recast.

Finally, an even more fundamental question concerning the present basis for certification may be raised; namely, dare we assume without question that the present basis for certification is indeed the best possible? Armstrong, in discussing problems to be solved in trying to meet a democratic society's need for professional teachers, makes this pertinent statement:

Most certificates . . . are now issued by state departments or state boards of education, usually . . . on the basis of a transcript of credits from an approved college or uni-

⁶⁰ *The Improvement of Teacher Education. A Final Report by the Commission on Teacher Education* (Washington, D. C., American Council on Education, 1946), p. viii.

versity. . . . Standards as to minimum requirements and so on are also important, *but the most urgent problem is this one of determining the basis on which certificates will be granted.* (Italics not in original.)⁶¹

Is it possible, then, that the present basis for certification, earned academic credits, may be inadequate? Should those who are concerned with certification, while continuing to deal with immediate problems of the proper amount and kind of formal teacher training, also be looking to possible alternative bases for cer-

⁶¹ W. Earl Armstrong, "A Democratic Society Needs Professional Teachers," *Annals of the American Academy of Political and Social Sciences*, 265:140, September, 1949.

tification? On these questioning notes we terminate the present general discussion of the practice of teacher certification in the United States, concluding that at mid-twentieth century both the theory and the practice of certification must be called unfinished business.

One important phase of that unfinished business is the question of five years of formal preparation for teachers, especially for teachers of academic subjects in secondary schools. It is with this question, or more exactly, with the idea and practice of requiring five years of preparation for teacher certification that the second article will be concerned.



REVIEWS

Cultural Foundations of Education, by Theodore Brameld. New York, Harper and Brothers, 1957. xxii + 330 pp. \$5.00.

Theodore Brameld's writing belongs properly in the philosophical foundations of education. The title of this latest of his published works could create the mistaken expectation that he is working primarily as a social scientist. He is always primarily a philosopher of education. The subtitle locates him more accurately: *A Systematic Examination of the Theoretical Foundations of Education in Their Cultural Setting*. As such the book is actually a direct and impressive continuation of the theoretical position set forth in his two books of 1950, *Ends and Means in Education*, and *Patterns of Educational Philosophy*. Recognition of this continuity is an important aid to the understanding of the author's teaching. His well-rounded theoretical position had taken definite and confident form when he wrote these earlier books. In the present volume, he employs this position as a critical point of view from which to examine some of the social sciences, principally and prevaillingly the works of the anthropologists, as these may be pertinent to the direction and conduct of public education.

A brief review can cite only a few of the facets of Brameld's position and note how, as essentials in his critical viewpoint, they guide his search into the educational significance of modern cultural anthropology. First his position has much basic affinity with the philosophy that has prevaillingly accompanied the wide progressive movement in education in this country; with its thoroughgoing naturalism; its full acceptance of science; its orientation in freedom

and democracy; its incorporation of art; its strong belief in the social constitution of the individual personality; its rejection of cultural rigidity; its disposition to work in and with change, not fearfully against it; and, finally, its realization that the purposes and institutions of education are integrally involved with those of their social-cultural medium and to be dealt with always as such. But, second, his most distinctive emphasis is upon the goal-seeking character of education, upon seeing it as primarily a process of "social self-realization," both cultural and individual. From this viewpoint he has become an outspoken critic *within* the movement to liberalize educational thought and practice. He believes that the times call upon us as educators to give far more serious, direct and thoroughgoing attention to our integral involvement with the cultural problems that are tending all too rapidly to become dangerous centers of personal and public crisis, far more, that is, than even the progressive philosophers of education have given. He charges them with being too vague and too generally committed to the great moral principles of democracy and with having too exclusive allegiance to the tentativeness of scientific method when they should rather be charting goals ahead, goals worthy of strong commitment and of vigorous, convinced teaching. This is Brameld's working position. All his books in recent years are devoted to elaborating and pointing it up. This is the way to understand his present writing on anthropology. Inasmuch as the nature and the dynamics of education are so identified with the nature and dynamics of culture, we would do well, he holds, to turn for insights to those who are the most searching and systematic students of cul-

tures, the anthropologists. This should be a fruitful relationship to cultivate, and as the author portrays it, after an amazingly extensive and penetrating study, this fruitfulness begins to take on worthy proportions.

Only seasoned students of anthropology should venture to appraise Brameld's survey and presentation of what is being done in that field; I can only say that the reading of this report and analysis has been good for me; I have something of worth, something I now hold indispensable to adequacy in educational thinking, something that came from this reading. Special students of school practices and the school curriculum will be prepared to appraise the book from their angle, as will also the educational psychologists and the other social and political scientists. I prefer only to call attention to a few points which excite my special interest. One of these is the author's response, implicit and explicit, to the persistent and difficult question of how to establish the basic values and goals which are required for intelligent direction in the educational program. He says, first, that they should come from insight and study into the living culture of the people served; and second, that their degree of confirmation is always in the degree of free "consensus" of the people sharing this culture. As such there are some values very deeply settled, the kind we reiterate in our spoken moral, religious, and patriotic observances and resort to if we would elicit the public support of a measure or cause. Whether there are universal values of this kind is today a moot question. The author and some of the current anthropologists believe there are some which are *potentially* universal. But he rejects any a priori assumption of them. He prizes this very general kind of values but distinguishes between them and what he calls "blueprints" for guidance of future aspiration and effort. The latter assume the general values but are formed in more concrete cultural terms representing people's needs and preferences and serving as goals which elicit the free commitment of peo-

ple, and as such become effective guides to educational plans, programs and choices. It is the failure to work toward such blueprints that constitutes the author's chief point in criticism of the progressive movement.

Closely connected with his emphasis on blueprints is Brameld's belief that while the method of science must be employed persistently and increasingly in the study of things and cultures, it alone is not adequate for the task in hand. He insists that the formation and observance of values and goals, while including science, is a "normative" function, that it must be pursued as such and that its formulations and findings must be vindicated and established as such. The key to this normative function is the phenomenon of consensus. Its dynamics and its discipline are focused in the quest for and observance of consensus.

While I believe that Brameld's general argument in this connection is defensible and sound, still whenever in all of his books he deals with this problem of method, his strides are too long for the comfort of a critical reader. The subject is so crucial in his whole position that closer analysis would greatly help the reader to check for adequacy or to go along with assurance.

Special mention should be made of the author's chapter on freedom, and especially of his readiness to see freedom as a necessary condition for arriving at the establishment of dependable findings both in scientific and in normative efforts. No part of his whole argument could be more penetrating and more significant than this for our times and for our educational thought and practice.

Many will be interested in Brameld's work as a type of study in the social and philosophical foundations of education. Always with us is the problem of the relations of these foundations to the university disciplines. Although there are many aspects of the book worthy of note in this connection, I mention only one. As a philosopher of education the author, in effect, inquires of the anthropologists whether and to what

degree the theories underlying their research take account of related problems in theory with which the educator must cope. In an implicit way, he is proposing that the theoretical needs of education may have an important part to play in shaping the theoretical structure of the anthropologists' research. A suggestion to this effect in regard to Brameld's book came from a conversation with Dr. Kenneth Benne of Boston University. The usual idea is that we as educational theorists turn to the university disciplines to find from them what can be known that throws light on the educational task. This we shall continue to do, but the connection would be much better as a two-way street. And until it becomes a mutual undertaking its fruitfulness will be seriously limited. There is a suggestion also that better results may occur when both education and some particular field of university study are examined and compared in their theoretical foundations. Brameld has given us a worthy and challenging example of this procedure in connection with anthropology. The results, I believe, justify the trust that it will apply with equally good effect in relation to other branches of systematic knowledge and research.

R. BRUCE RAUP

Teachers College, Columbia

Changing Values in College: An Exploratory Study of the Impact of College Teaching, by Philip E. Jacob. New York, Harper and Brothers, 1957. 174 pp. \$3.50.

In these days of unprecedented expansion in American higher education the worth of the undertaking is largely an unquestioned article of faith. The evidence is unmistakable that persons with a college education stand to gain economic and social advantages over those without it. Hence the scramble for admission and the acute pressure for more facilities. It is also certain that students do grow in knowledge and skill through their college experience. But

what difference does college make in students' *values*? What is the effect of higher education on interests, beliefs, commitments, and attitudes? In short, how does college influence character? It was to help answer these questions that the study under review was made.

This book is not a report of new field research, but a critical interpretive summary and analysis of existing research data, comprising some 354 items listed in the annotated inventory at the conclusion of the study. Professor Jacob has skillfully marshaled the large amount of available evidence about the value impact of college teaching and has presented it with unusual clarity, wit, and candor.

The conclusions leave no room for complacency. They will come as a shock to educators who have assumed that college teaching has a direct and decisive effect on student attitudes and values. The evidence indicates that by and large the formal curriculum has little such influence, regardless of type of institution, courses taken, quality of teaching, or methods of instruction. That is to say, the variables which are generally thought to make a major difference in educational outcomes in fact appear to be largely irrelevant to the creation and transformation of values.

According to well-authenticated research findings, American college students exhibit a remarkably homogeneous pattern of values. The large majority are contented, self-centered, tolerant, traditionally moral, conventionally religious, obedient to government yet politically irresponsible, both optimistic and gloomy about international affairs, and convinced of the great vocational and social advantages of their college education. The effect of the college experience on values is chiefly to socialize the individual, bringing him into conformity with this standard college pattern. Moreover, this influence is not produced by the formal curriculum, but through the impact of the total college environment.

The study was initially intended as an investigation of the value outcomes of gen-

eral education courses in the social sciences. It was found that students in these courses were not influenced in significantly different ways from other students, except sometimes for a redirection of academic or vocational interest as a result of such study.

In contrast with these generally negative conclusions was the evidence of the peculiar potency of certain colleges—mostly smaller private ones—in effecting changes in students' values. A consistent and powerful tradition, spirit, or climate pervades these institutions and tends to produce a distinctive outlook in their students. This finding is both encouraging and suggestive because it shows that colleges *can* make a significant difference in values and because an analysis of the potent institutions may supply some hints about the conditions for such effectiveness.

While the material relating to the insignificant value influence of the teacher and to the irrelevance of teaching methods is particularly depressing, there is some encouraging evidence that now and then an unusual teacher may profoundly affect his students' attitudes and that certain value-laden learning experiences in which students directly and responsibly participate may be deeply influential. These exceptional cases also suggest directions in which the search for educational efficacy should be pressed.

A final section of the study reports on research relating student values to certain personality patterns, especially those of the so-called "stereotype personality." Some useful suggestions are made regarding an approach to the remedial education of such persons, of whom there are a great many in institutions of higher learning.

Reading the Jacob report will surely serve to relieve college educators of smugness concerning the impact of their work on students' character. It should also impart a due modesty concerning the role of formal courses in personal development. Above all, it should make abundantly clear the long-term effect of the entire social milieu, both before college and during college, on the

formation of the student's character and value structure.

I think I must say that Philip Jacob's report is one of those rare publications that *everybody* in higher education ought to read. Not that it is a "great book." It was never intended to be that. It *is* an important summary of important studies of an important problem. Furthermore, there is no excuse for not reading the book. It is short, well arranged, and written in an engaging style. The author makes clear the limitations of his materials, yet he does not so hedge on his conclusions that they lose their force. He rounds out the study with a concluding "note on further inquiry" which provides some stimulating suggestions for next steps in value explorations. This provocative and absorbing book is required reading!

PHILIP H. PHENIX

Teachers College, Columbia

The Liberal Arts College: A Chapter in American Cultural History, by George P. Schmidt. New Brunswick, Rutgers University Press, 1957. ix + 310 pp. \$6.00.

Perhaps the most distinctively American feature of higher education in the United States is the liberal arts college. From the founding of Harvard in 1636 until about 1870 it was almost the only kind of institution for advanced study in the country. And in the period from 1870 until the present, during which the liberal arts college was obliged to compete with new and rival professional and technical schools, it has remained the basic undergraduate type of institution. During this latest period in which the primacy of the liberal arts college was challenged, its fundamental nature has changed so markedly that a graduate of the class of 1858 would scarcely recognize his alma mater, were he to look in on it a century later.

In the book under review George P. Schmidt, professor of history at Douglass

College, has told the story of the emergence of the college in colonial times and its sometimes chaotic growth and development during the century and three quarters of our national life. Professor Schmidt is no novice in the field of the history of higher education; he is also the author of *The Old Time College President*, a fine study published when good books about colleges and universities were much more rare than they have been in recent years.

In the first portion of the volume the author emphasizes the religious impulse which underlay the founding of nearly all colleges before 1870. In a notable chapter he delineates the role of the college president, who prior to the past eighty years was in nearly all cases a clergyman. The influence of religion on every aspect of collegiate life was insured and enforced by the long lines of clergymen presidents.

If the colleges founded prior to 1870 were almost always controlled by religious denominations, their curricula were also remarkably similar. The spell of Greek and Latin lay heavy on them, and the classics along with mathematics and spoken and written English comprised the standard academic fare until late in the nineteenth century.

After 1870 the story is one of the breakdown of the old order in higher education. The classical tradition was successfully challenged and varied curricula emerged to replace it. New secularly oriented institutions under private or public auspices arose and other religiously centered colleges evolved into independent, secular institutions. The highly trained specialist replaced the old-time college professor who, besides being a clergyman, taught perhaps half a dozen different subjects.

In the transformation of the college in the last decades of the nineteenth century Professor Schmidt singles out three forces which appear to have had the greatest impact in forcing change. The first of these was the rise of the Midwestern state university: "In such a school not only the classical student laying the foundations for the min-

istry or the law, but the farmer, the mechanic, the merchant—in short the *people*—could find the kind of training and information they needed."

The second force which brought about fundamental change was the importation of German concepts of the scholar and scientist. No longer was the academic settler of the old-time college professor respectable; only the specialist with his Ph.D. from a German university would do. Before long some American colleges were adding graduate schools, changing their names to universities and producing Ph.D.'s also. The third force which made for change in the colleges was the introduction of the theory of evolution into American academic life. The most fundamental tenets of many clerical professors and presidents seemed threatened by this strange doctrine which eventually became almost universally accepted in American colleges.

In discussing the liberal arts college in the twentieth century, the author stresses the ideological battles which raged between the rival schools of thought represented by John Dewey and Robert M. Hutchins. In this chapter one sees especially clearly the fair-minded objectivity and thorough knowledge of the subject which characterize Professor Schmidt's book. He knows the American college scene thoroughly, as he demonstrates both in his narrative and in the notes and bibliography. This reviewer can recall no source of any consequence which Professor Schmidt has overlooked. His final chapter outlines the growth of the concept of academic freedom in American colleges and universities.

The Liberal Arts College is a first-rate study by a highly competent and seasoned scholar. It is written simply and clearly and in an informal manner. This reviewer has noted only two items which he would question. The first, a minor matter, is the statement on page 196 that Harvard and Yale have never had chapters of national fraternities. Both institutions have, in fact, had chapters of national fraternities sometime during their history. The second is the ob-

servation on page 234 that not much expansion of honors programs can be expected in the near future. There is at present considerable stir in the large state universities in this area, and it is the reviewer's belief that honors programs may flourish during the next decade in the state universities, where with only a few exceptions very

little has been accomplished until recently.

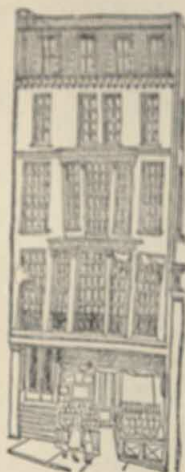
Professor Schmidt's book is both an excellent account of the fundamental unit of the American higher educational system and a distinguished contribution to American cultural history.

FREDERICK H. JACKSON

Carnegie Corporation of New York

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- Archer, Clifford P., *Elementary Education in Rural Areas*. New York, Ronald Press, 1958. 448 pp. \$5.00.
- Berkson, I. B., *The Ideal and the Community*. New York, Harper, 1958. 302 pp. \$4.50.
- Gross, Neal, Ward S. Mason, and Alexander W. McEachern, *Explorations in Role Analysis*. New York, Wiley, 1958. 379 pp. \$8.75.
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TEACHERS COLLEGE RECORD

Controversy in Teacher Education: The Central Issue*

STEPHEN M. COREY

PROFESSOR OF EDUCATION AND DEAN, TEACHERS COLLEGE

I^N this discussion I shall try to do three things: first, comment on the difficulty I am having thinking clearly about teacher education when much of what I stand for is under attack; second, develop what seems to me to be the neglected central issue in the current discussions about teacher education; and finally, suggest briefly what I think we teacher educators ought to be stressing.

OUR UNDERSTANDABLE DEFENSIVENESS

Like most of you, I have spent my professional life working to improve teacher education. From time to time I have been critical of much that we do, as have many of you. By and large, though, I have believed that we were tackling important problems with determination and as much

creativity as anyone could be expected to muster. In light of the complexity of the difficulties we faced, I felt that we were making progress with commendable speed. These convictions, and the inevitable identification a person develops with his professional peers, have resulted in my getting strong feelings of support from association with teacher educators. They constitute my primary professional reference group. I'm comfortable with them. Their idiosyncrasies are mine. I use and understand their language and enjoy their rituals and ceremonies.

This kind of identification with a professional group, as I know you realize, is not an unmixed blessing. To the degree any one of us identifies closely with others who are doing what they can to improve teacher education we resent criticisms of our efforts and our achievements, especially by persons we consider to be outsiders; that is, people without

* An address given February 20, 1958 at the opening session of the annual meeting of the American Association of Colleges for Teacher Education.

much experience in teacher education. With me this resentment is strong and causes me to react to criticisms with surprising defensiveness. I fail, often, to distinguish between what I say that represents my deepest convictions and what I say because I'm angry. Occasionally I think quite inexcusable things about the personal integrity of men and women whose views about teacher education differ sharply from mine. I inquire into their biographies and am elated at any discovery that suggests weakness or duplicity. Now and then I find myself rejecting certain ideas about teacher education that I have thought promising for a long time merely because these ideas are championed by people who seem to have little respect or sympathy for what my associates and I have been doing through the years.

Of course we teacher educators are not unique in our reaction to criticism. Doctors, bankers, lawyers, and foundation officials are also human beings, and get hurt and defend and rationalize. Right now, though, the amount of criticism you and I are trying to absorb and cope with is unusual. This makes it hard for us to say, "Let's look at this suggestion as dispassionately as we can, and if it seems promising, try it out under circumstances that will tell us whether or not the proposal has merit." One reason this is hard to do, of course, is that our critics are often as positive that their proposals are right and good as we seem to them to be impervious to new ideas and stubborn in defending the *status quo*. Dogmatism begets dogmatism and precludes objectivity or experimentation or fruitful discussion.

Another reason for the poor communication between us and those with whom we argue is the classic mistake antagonists make in not trying, really, to understand one another. I would travel some distance,

at my own expense, to listen to the officers of this organization and of the Fund for the Advancement of Education, for example, discuss teacher education in America *on one condition*. The condition is that the discussion be preceded by something that Carl Rogers insists is necessary for any meeting of the minds; namely, each side must first state what it believes are the assumptions and beliefs and recommendations of the other side, and keep on until both groups say, "Yes, that represents our position exactly." I'm not sure how long a discussion would last that was preceded by this attempt to understand but I'm sure it would be relatively clear and fruitful.

DISTRACTING SIDE ISSUES

The more I have thought and talked and read about the arguments we are having over teacher education the more convinced I have become that we rarely attend to the real issue. This real issue, which I shall look at more closely later on, is a basic difference in assumptions and convictions about public education and about the teaching-learning process. Almost all of our attention in the current controversy, however, seems to me to be centered upon peripheral questions that just cannot be settled by polemics. An illustration is our finding ourselves in an argument as to whether or not teachers should have a good liberal or general education. This, I think, is a false issue. The importance of a good general education for teachers at every level can be taken for granted. I don't know anyone who denies it. Many times I have felt, however, that we teacher educators are put in the position of seeming to oppose this basic idea. This we should never allow to happen.

I recognize, as do all of you, that there is much difference of opinion about the

nature of general education and the type of college program that gives greatest assurance of achieving it. These are quite different matters. They must eventually be resolved by experimental programs, not by argument. We teacher educators, however, can't hold everything in check until we get clear-cut evidence that one approach to general education is far better than another. What can we do in the meantime? In my judgment there is no alternative to basing our practice initially upon the most careful, even though subjective, analysis of our past experience that we can make, and subsequently upon whatever implications we can see for general education in what we know about human learning. Conclusions based upon these two ways of reaching judgments about general education programs will differ of course, but they suggest to me several things about general education. First, this kind of education cannot be separated sharply and clearly from professional or vocational or specialized education. Second, the likelihood is remote that a list of discrete courses, developed, fought, bled, and died for by discrete departments, will add up to a fine general education for many students; and third, it is optimistic to hope that a subject-matter specialist who does not view his specialty as general education will teach it as general education.

I believe we are on another side issue when we argue whether or not teachers should have special knowledge of whatever it is they are to teach. Of course they should have this special knowledge. To teach history, it is important to know history; to teach science, it is necessary to know science; to teach the English language, one should know the English language. There is an active debate, of course, and some research is being done to discover how this special knowledge

might best be acquired and what it should consist of. But again these are different questions. They too can be answered, if at all, by experimentation, not by heated arguments.

Again, though, we must do our best to prepare the young people we now have as students, and we can't wait until all the experimental data are in. What about now? My experience with teacher education, and what I think I know about transfer of training, lead me to the conclusion that a young person who knows he is going to teach physics needs a different kind of physics instruction from the young person who does not intend ever to teach physics. This doesn't necessarily mean that the prospective teacher of physics should learn, in an introductory college course, different subject matter from that taught the prospective atomic scientist or the prospective business man. It does mean, however, that he should be taught physics with continuous attention to the problems a learner faces who is trying to comprehend physics. There is little evidence that the typical college or university teacher of science, or of mathematics, or of history, or of literature teaches his subject so as to provide especial help to someone who, in turn, would like to teach it. I am not implying that students who plan to teach must, necessarily, be segregated in their "major" subject-matter courses. I do believe, however, that prospective teachers who are taking a course in American history, for example, would gain a lot if they were to meet together regularly to do two things: first, identify the relationships between what they are learning and what they might be expected to teach; and second, identify some of the difficulties most young people encounter when they try to learn American history.

We are on another side issue, I believe,

when we debate the desirability of having prospective teachers spend a lot of time in public school classrooms. Practice teaching is a valued and integral part of every preservice teacher education program I know anything about or have heard seriously recommended. The substantial differences of opinion as to when practice teaching might best be done and what other kinds of experience it should be associated with had better be dealt with experimentally. But again, what should we do in the meantime? To answer this question I fall back upon the inferences thoughtful people have drawn from many years of experience with practice teaching, as well as to some of the things I think we know about learning. Both of these approaches lead me to believe that a student ought to be inducted into the realities of teaching-learning situations as soon as he enters a teacher-education program. This doesn't mean, of course, that he starts practice teaching immediately. It does mean, though, that very early in his training he gets back into public school classroom situations where he can practice making observations and assessments and inferences regarding what is going on. Making a sharp separation between teaching theory and teaching practice is an artificial compartmentalization of training experience that reduces the likelihood of transfer. In an ideal teacher-education curriculum, the student shuttles back and forth between observation and participation and practice teaching on the one hand and pedagogical theorizing and conceptualizing on the other. This kind of arrangement is, of course, not at all easy to develop or administer. Until I see evidence, however, that persuades me otherwise, I shall look with a great deal of skepticism on any proposal that we separate the acquisition of knowledge *about* teaching from the

acquisition of knowledge of what to teach or from actual field observations and practices that are designed primarily to result in the development of adequate teaching behavior.

Another side issue, it seems to me, is the debate as to whether members of a liberal arts faculty or of a department of education should teach the history of education or the philosophy of education or educational psychology or educational sociology to prospective teachers. The extent to which these courses are related to professional problems and to professional motivation is, of course, of great importance. Whether or not, however, *well taught* professionally oriented courses in philosophy or psychology or sociology or history should be offered here or there is another matter that can't be settled by argument. We should try it both ways under experimental conditions and see what the consequences are.

In the meantime, though, and until these experiments are conducted, my experience leads me to believe that it is unrealistic to expect that a teacher of philosophy who has no particular interest in education, or in the teaching-learning process, or in the profession of teaching, will teach educational philosophy to prospective teachers very effectively. Similarly, I know of no professor of psychology not concerned about education, or about the teaching-learning process, or about the profession of teaching who has taught educational psychology to prospective teachers very effectively. Until I see better evidence than I have so far that these foundation courses for teachers can best be taught by faculty members who are not deeply concerned with the professional problems that teachers face, I want them taught by people who have that concern. Heaven knows, even under this circumstance, the teaching is all

too frequently without much meaning!

To conclude my comments on the side issues, I see little point to the argument as to whether teachers colleges as separate and single-purpose institutions are disappearing. That they are becoming fewer is a fact. What this fact means, of course, is subject to considerable difference of interpretation, but again, these differences can't be resolved by argument. We need more facts.

DIFFERENT CONCEPTIONS OF AMERICAN EDUCATION

At the same time that I feel that debating the questions I've just cited, or others like them, misses the real issue, I think I know what this real issue is and many of you, I suspect, have reached the same conclusion. I believe that the real issue, as I said earlier, grows out of basically different conceptions of the purposes of American public education, and of the teaching-learning process that gives most promise of fulfilling these purposes. Here is what I mean: If you are disposed to believe that the primary, if not the exclusive, aim of public education is to teach a limited number of important skills or a predetermined body of important subject matter; and that those who find this material hard to learn should not go to school very long; and that the boys and girls who do not master the skills and the subject matter as fast as adults believe they should are somehow bad, and teachers should not have to contend with them; and that discipline is best engendered in children by imposing on them somewhat fixed and presumably high standards—if you hold these beliefs or others like them, your conclusions about teacher education are almost inevitable. You will conclude that teaching, as such, is not too difficult or too complicated, and that almost anyone can do it com-

mendably if he is reasonably bright and a college graduate, and if he knows enough about what he's trying to teach and can make children behave.

This conception of education and of teaching is firmly held by large segments of the American public. It is accepted by many college professors who provide not only the general education for teachers but also the special education in subject matter for high school and college instructors. This conception gives little support to the idea that protracted preparation for the professional aspects of teaching is necessary. Some teachers are better than others, of course, but this is a consequence of a complex of unpredictable personality and environmental influences and bears little relation to programs of teacher education.

When you believe these things, and as I have said many sincere and respectable people do, it is quite reasonable to contend that knowing what is to be taught is by all odds the major responsibility of the teacher, that professors of psychology or history or philosophy or sociology in liberal arts colleges can teach an additional course, or give their current courses a twist that will throw some light on educational questions. Believing these things, it is quite natural to urge that the amount of time being given to professional education might well be reduced so that we can provide, as President Griswold recently put it, a "massive infusion of the Liberal Arts" into the education of secondary school teachers. Believing these things, it is easy to contend that so far as the tricks of the teacher's trade are concerned, these can best be picked up on the job, working cheek by jowl with the experienced teacher who has herself learned these tricks.

You and I, it seems to me, find it impossible to accept this view of teacher

education because we hold different convictions about what American public education should be, about the young people for whom it should be provided, and about the kinds of teachers who are needed to facilitate it. Most of us believe that the tremendous variations among boys and girls, their backgrounds, their motivation, and their needs require that the curriculum be flexible rather than predetermined. Most of us believe that all American boys and girls should have experiences, at least in the elementary and secondary schools, that are maximally meaningful to them at the time, and that their judgments are necessary if we are to know what is meaningful. Most of us believe that discipline is a consequence of practice in planning and in decision making, and of experience with their consequences. Most of us believe that citizenship and health are proper and important educational goals and that these goals are not achieved merely by acquiring information *about* citizenship or health.

Because of these beliefs, most of us take the view that good teaching is exceedingly difficult, complex, dynamic, and exacting. Good teaching is of a different order from keeping school. We are certain, too, that the attitudes and feelings and concepts and practices that distinguish the fine teacher have been learned and can, to a substantial degree, be taught. This almost inevitably leads us to the conclusion that the pre-service as well as the in-service education of teachers cannot be casual or incidental or turned over to people with quite different assigned duties. The professional education of teachers must be the central concern of some group.

One of the inevitable consequences of our holding these views about American public education and about the kind of preparation teachers need in order to

serve their profession wisely is that getting them into practice requires large amounts of money. Other ways of providing for the education of teachers may be less expensive. This attractive fact, however, should not, it seems to me, be unduly weighed.

I recognize how misleading analogies are, but I want to stress the conviction that the *central* issue which separates those of us who are primarily concerned with teacher education from most of our critics is a different conception of education and of learning and teaching. For us to agree on teacher education would be about as unlikely as agreement on what should be done for peace in a discussion between Friends or Quakers and the West Point faculty. These two groups would go into their discussions with such different assumptions and conceptions of the causes of war as to make it virtually impossible for them to come to common terms on any program for world peace.

WHAT TO DO

Personally, I don't anticipate much reduction of controversy about teacher education until we and our adversaries move a bit closer to one another in our conception of the purpose of public education and what this demands of teachers. I do, however, believe that we teacher educators can do two things that in the long run will benefit everyone. First, we can, in all of our public discussions, try to see to it that not only those we argue with but we too keep our eyes on the central issue. We should miss no chance to point out the implications for this central issue of every teacher-education proposal that is made.

I am convinced that our conception of the kind of education that is best for American young people, and our conception of the role of the teacher will con-

tinue to win adherents. During the past fifty years, pressures in the direction of curricular flexibility, of humaneness in relationships between teachers and pupils, of making school work attractive to ever larger numbers of boys and girls, of seeing to it that what is learned is maximally practical in the best sense, as well as pressures to develop teacher-education programs that will help achieve these purposes, have been irresistible. As more and more young people continue in school, any diminution in the power of these forces is unlikely. Certainly, temporary setbacks have occurred and will occur again. What worries me most, I guess, is that we may do less than we might to strengthen what appear to me to be forces for good by giving too much attention to the little battles and too little attention to what the war is all about.

A second thing I earnestly hope we will work on with increasing dedication is putting our own house in order. I have much more confidence in the correctness of my convictions about American education, about what good teaching requires, and about how teachers ought to be educated than I have in what I as an individual have done here and there to improve the education of teachers. I recognize that new and interesting and promising ideas are being experimented with in teacher-education institutions in some places.¹ For the most part, though,

¹ Paul Woodring says in his *New Directions in Teacher Education* that presidents of teachers colleges may have shown too little indication of willingness to tackle major ways of approaching the problems of teacher education and have submitted too few imaginative proposals for consideration by Fund for the Advancement of Education officials (p. 25). This contention is, of course, impossible to disprove because no report, to the best of my knowledge, is made by the Foundation on the proposals submitted to it for consideration to which it reacted negatively. The implied accusation, however, made me stop and think. One thing I

I suspect many of us are going on doing much as we have been doing for the past twenty years. I can imagine no more significant single indication of the vitality of teacher education than the existence of a tremendous amount of experimentation and testing of new and promising ideas. This, it seems to me, we ought to be doing much more of.² In addition to experimentation related to some of the side issues in teacher education I have commented on, I wish we could move faster in getting evidence in some other critical areas. To what degree are we teacher educators achieving the goals we say we're trying to achieve, for instance? I know of no teacher-education institution, although you may, that has good evidence to back up the claims typically made in the front matter of the college bulletin. Another question I should like more evidence on is this: What college experiences, in addition to courses, bring about significant and desirable changes in prospective teachers? There is some reason to believe that the general climate of a teacher-education institution has more lasting effects upon the attitudes and dispositions and points of view of its students than do the courses. If this is so we ought to know much more about it than we do.

A third question we know too little about has to do with the kinds of student self-direction that are conducive to effectiveness as a teacher. Relatively little is done in many teacher-education institutions to teach independence. Few people defend this situation, but we need to

thought of was that Fund officials, given their conceptions and assumptions about education, might not even recognize creativity related to different conceptions and assumptions.

² The last issue of the *AACTE Bulletin* (Vol. 10, No. 14, December 27, 1957) describes briefly a large number of current studies of teacher education.

search much more energetically for ways and means that will increase student independence.

These questions are only suggestive. Chapter 3 in your own 1956 publication, *Teacher Education for a Free People*, cites scores of similar problems that cry out for experimentation and investigation.

In this connection, I have often wondered what additional and exciting studies might now be going on in teacher education if six or seven years ago several million dollars had been made available for this purpose with the sole stipulation that the money be used to test promising ideas—many kinds of promising ideas. In my fantasy I assume that the funds would be administered by a unique group of men. First, they would have no compelling convictions about the *solutions* to teacher-education problems which would lead them to finance selected demonstrations or innovations. Second, the group administering the funds would realize that teacher educators are probably as strongly disposed as any other professional group to study what they do and to experiment in their attempts to improve. Third, these men would be convinced that improvement in teacher education means changes in the beliefs and understandings and practices of the people who are actively engaged in teacher education. Finally, this idealized group of foundation officials would know that improvements are most likely to take place

in teacher education when teacher educators are involved from the beginning in the planning and the experimentation that is designed to lead to these improvements.

SUMMARY

The argument I have tried to present has not been, I am sure, particularly involved, but I do want to conclude by summarizing my major contentions. First, many of us teacher educators are finding it difficult to be objective and penetrating in our analysis of criticisms of our work because we react to attack, as most people do, by defending what we've done. My second point was that a great deal of our time and the time of those who differ from us is, in a sense, being wasted through attention to a long list of peripheral issues. Third, the central issue that divides us from those who advocate a different kind of teacher education is centered in a number of fundamentally different conceptions about American education in general and the role of the teacher. Finally, in light of all of this, the most important things we can do, not only in the near future but in the long run, are to continue to call attention in public debate about teacher education to what the central issue is, and at the same time to experiment continuously and systematically to put our own house in order.

Essentials of School Law for Educators*

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NO OTHER important aspect of the public school enterprise has been so much neglected as relationships of education with the law. The reasons for this appalling gap probably can be explained, but the situation itself cannot be condoned. It is somewhat encouraging that during the last few years an increase in interest in school law has been noticeable. Interest must be focused, however, in order to be meaningful and productive. The purpose of this discussion is to suggest the minimum essentials of knowledge about school law which should be possessed by all engaged in any way in the public school calling. One who attempts this task may well be considered presumptuous; that risk is taken as one calculated (hopefully) to provoke discussion and action toward the establishment of a broad design for training in this area so vital to effective public school operation. Thus, with appropriate humility, the following ten generalized "knowledges" are suggested as basic.

1. *Importance of legal considerations in educational decisions and actions.* Public schools are creations of the law. Rights,

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duties, privileges, and immunities related to public education and the individuals concerned with it are delineated and circumscribed by law. Yet all too frequently the legal ingredient in an educational situation is overlooked. Badly needed is an awareness of the field of school law as a subject for professional inquiry and professional action by educators.

At present there are three all too common and regrettable attitudes about school law among educators. The first is a naive obliviousness to the legal aspects of the education enterprise. This ostrich attitude often constitutes "living dangerously" or, at best, operating at decreased effectiveness. Because there has been no recent "trouble" of a legal nature in connection with one's activities is no more justification for this attitude than is the fact that one has never been hit by a car while crossing a street against a red light. A second attitude is one of baseless fear of the law—seemingly born of unfamiliarity—a definite hindrance to the professional job an educator could and should do. A third attitude is based on an exaggerated delusion of knowledge regarding legal aspects of education. This is especially unbecoming to those in an occupation emphasizing scholarship and responsible for training competent citizens. It is also extremely dangerous, as is the delusion of any type of knowledge. Those who purport to give specific answers to

complex legal questions should be treated warily.

There is a legal ingredient in almost every educational decision—whether it involves punishing a pupil, requiring a pupil to take a course, operating a school cafeteria, employing a teacher, using a school building, expending school funds, keeping records, transporting pupils, or reciting the Lord's Prayer in school. In some situations the legal ingredient is the crucial factor; in others it is relatively insignificant. This involvement of the law is similar to that of other facets which should be considered before taking educational action—considerations in such areas as psychology, teaching method, sociology, and community relations. Obviously there are many ideas apparently good educationally or socially which are not legally acceptable, and conversely many things permitted by the law may be undesirable educationally or socially.

2. *Role of law as help or hindrance in achievement of educational goals.* Often the law is used as an excuse for saying no to a new educational idea, and thus is blamed as a blocker of progress. In many cases the charge is justified. However, the law can *help* achieve desirable educational goals. Certification laws for teachers are a good case in point. While they alone cannot assure good teachers, proper certification standards can go far in helping to improve the quality of teaching in the public schools. On the other hand poorly drawn certification regulations can thwart the placing in classrooms of many good teachers. Whereas laws prescribing specific books which must be used in given courses or those establishing unrealistic limitations on school expenditures have impeded educational progress, state minimum salary laws have contributed to the removal

of exploitation salaries for teachers, and tenure laws have done much to make the efficient teacher secure in his position.

In terms of a specific item of concern there are four possible legal situations which may prevail. First, the "thing" must be done (for example, American history must be taught). A second possibility is that the "thing" cannot be done (for example, sectarian doctrines must not be taught). A third situation arises when the "thing" is specifically permitted at the option of someone or some body (for example, sabbatical leaves for teachers may be granted at the option of the local school board). The fourth possible situation is the most common one: the law is silent about the item (for example, there is no mention in any source of the law of the uses to which school buildings may be put when school is not in session).

One reason for the prevalence of the last situation is that characteristically the law follows, rather than precedes, experimentation or custom. Theoretically, someone must have an idea and try it out somewhere before it can be specifically treated in a statute or ruled on by a court. Educators should know that historically innovations and progress in education have come as local boards of education and school personnel have decided that some practice would be wise and have experimented with it, other districts have copied the practice, gradually it has become generally accepted throughout the state, and ultimately the practice has found its way into a permissive or mandatory statute.

One of the best ways to promote the spread of a new and desirable educational practice throughout a state is to enact a permissive statute on the point. This will encourage local boards of education to adopt the practice because clearly it is legal, having been stated in a statute. At

the same time, the negative effects often concomitant with a requirement that every local school district do something are not included.

3. *Substance and scope of school law.* School law includes much more than the statutes of a state. It comprises all the rules of conduct from any source which are in any way applicable to the schools and which will be enforced by the courts. Some of it is quite elusive, for it cuts across established lines. School law can be categorized in such frameworks as the following: (a) level of governmental source, (b) branch of governmental source, (c) category of law, (d) compiled law or common law source.

Viewed by level of governmental source, school law items would range from the Constitution of the United States to the regulations of teachers within their classrooms. The Federal Constitution does not specifically mention public education, and therefore under the Tenth Amendment this function becomes one reserved to the states. However, the increasing number of decisions of the Supreme Court of the United States based on the Federal Constitution indicates the increasingly important role in educational policy played by that document. The First Amendment, for example, is the core of the large amount of litigation concerning church-state-education relationships. The Fourteenth Amendment is the basis of the racial segregation and teacher loyalty decisions. The Fifth Amendment is also pertinent to certain cases involving teacher loyalty. The constitutional provision prohibiting the impairment of contracts by state law is basic to many contract disputes.

Below the Constitution of the United States in the legislative hierarchy come federal statutes. Several of these directly

affect education (for example, those pertaining to the school lunch program and to vocational education). On the state level there are four steps of legal authority governing the schools: the state constitution, state statutes, regulations of the state board of education, and regulations of the chief state school officer and the state department of education. It is on the state level that most of the codified law regarding education appears. On the local level are regulations of the local board of education, of the superintendent, of building principals, and of individual teachers. Theoretically, no law or regulation can be contrary to a policy promulgated on any level higher in the hierarchy. In many instances, however, whether a statute or regulation is legal or illegal cannot be finally determined until ruled upon by the courts in an appropriate lawsuit.

Another way to categorize school law is by branch of governmental source—legislative, executive, or judicial. Most of the law, as would be expected, is found in the legislative area, including statutes and regulations of legislatures, state boards of education, and local boards of education. Administrative rules and regulations, whether on the federal, state, or local level are issued by the executive department. The judicial branch plays a critical role in the school law area along two lines: interpreting constitutions, statutes, and regulations; and applying common law principles to educational issues.

The traditional categories of law are cut across by school law. Contract law is involved in employment of teachers and in dealing with builders and suppliers. Tort law (civil law not involving contracts) includes such elements involved in operating schools as negligence, trespass, and nuisance. Much school law is found in the law of municipal corpora-

tions. The important role of constitutional law in school matters has already been noted. Even criminal law may be involved in such things as enforcement of compulsory attendance laws and assault and battery suits arising out of incidents of corporal punishment.

A fourth way to analyze school law is to classify it in the dichotomy of compiled or written law as found in constitutions, statutes, and regulations, and of common or case law as found in court opinions. One can search the written law relatively easily and find, for example, the subjects that must be taught in the schools. However, the issues involved, for instance, when a pupil is injured on school property would have to be derived from the case or common law.

4. *General nature of legal knowledge appropriate for educators.* The knowledge of the law that educators should possess is on the level of general understanding and appreciation of broad processes of law—obviously not on the level of the legal practitioner. Perhaps educators' requisite knowledge of law can be characterized as being part of necessary broad, general background. Its type is in many respects analogous to the knowledge of first aid in relation to medical knowledge, or to knowledge about school-building planning in relation to the field of architecture. Educators should know certain overarching principles of the law which are pertinent to educational problems. Furthermore, they should know how these principles have been applied in specific instances involving educational matters. Enough familiarity with law is needed to work effectively in educational areas with legal aspects and to communicate meaningfully with lawyers and legislators. This lack on the part of too many educators is tragically evi-

denced by the large number of unnecessary court actions and the weakness of rapport between educational groups and legislative agencies in many localities. Rapport on the state level means much more than getting a salary increase voted by the legislature; it involves working with legislators to set up desirable educational policies for the state. On the local level it includes more than winning a lawsuit or staying out of trouble; it encompasses the provision of the best education possible within the existing framework of the law and taking action to change the law where progress is blocked by it.

5. *Evolutionary aspect of school law.* The law affecting schools is not static. It is changed to some extent in each session of the legislature in each state. Ever-increasing numbers of judicial holdings are continuously contributing to the body of school law. New issues are being litigated, and some old precedents are being superseded by newer judicial points of view. It must be borne in mind that law is a living thing. Furthermore, a given law is not good or bad in the abstract. It is good or bad in relation to how well it achieves its purported purposes. As circumstances change, so should the law.

Most states need thorough examinations of their school law along four lines. Three are essentially of a corrective nature and one is completely creative. Most urgent is the need to eliminate conflicts of law from school codes. Many statutes enacted at different times by different legislators overlap and contain contrary provisions. It should not be necessary to wait for a lawsuit to get the issue resolved.

A second goal should be the removal of vagueness from school law. Most state codes contain many loosely drawn laws. In such instances, too, it would save time

and money as well as promote efficiency to have the laws clarified by the legislature, rather than to wait for a judicial interpretation of the legislative intent. It is the legislative function to state the laws clearly, and where legislatures have not done so in statutes pertaining to education it is the educators' responsibility to ask for clarification and to suggest what the clarification should comprise.

A third weakness of most state school codes is the inclusion of obsolescent material. While these provisions may not have been invoked in many years, occasionally they come to light and cause difficulty. The custom of ignoring a law under the assumption that it is obsolete and will not be enforced is not a good one for a democratic society and is particularly inappropriate for those charged with teaching children respect for laws. The proper way to handle the problem is to get the obsolete statute or regulation repealed.

The fourth need is to incorporate in law new ideas and concepts conducive to educational progress. It should be pointed out that putting "good ideas" into mandatory legislation is not necessarily what is meant. Indeed some "good ideas" of bygone eras or of individuals whose insight was not as great as their enthusiasm or their political skill have resulted in many of the legislative millstones which hang around educators' necks. Good school legislation will evolve only as competent educators and competent legislators work together in a statesmanlike fashion.

6. *Some concepts regarding functioning of courts.* Astonishingly large numbers of educators are ill-informed about the role of courts in relation to the law. Among the basic concepts of the functioning of courts in the American legal system of which educators should be

aware are the five briefly discussed below.

The judicial branch of government is not constituted to sit in judgment over the actions of legislative bodies unless a question of constitutionality, state or federal, is raised. That is to say, courts will not pass upon the wisdom of a legislative act so long as it is constitutional or is within the power of the body. Unwise legislative enactments can be set aside only by legislative repeal, which can be brought about by democratic processes of persuasion directed at the legislative body or by action of the electorate at the polls in electing new legislative representatives. The local school board in the governmental structure is essentially a legislative body operating within a limited scope. It sets up rules and regulations to supplement state laws in governing the schools of the district. It has wide discretion. So long as its actions do not violate the law as established by higher legal authority or do not exceed its powers, the local board can be as unwise in its rules as the electorate of the school district will permit. The legal redress of citizens against an unwise school board lies at the polls, and not in the court room. Substantial amounts of money and energy have been wasted by teachers' associations, individual teachers, and citizens-at-large because of failure to understand this keystone of our American democracy.

A second basic concept is that courts are not automatically activated. Also, in general, they do not consider abstract matters. There must be a properly presented controversy in order for a court to decide an issue. Undoubtedly there are many laws and practices in force today which would not stand up in court tests. Thus, because a practice has been in operation for a long time does not mean that it is legal. Rights of teachers, rights of parents and students, rights of

taxpayers, and rights of other groups will be secure only so long as these groups are alert to infringements and institute appropriate legal action to protect their rights.

A third important understanding is that each case decided by a court is based on the facts of that specific litigation. Whether the judgment rendered would apply to a different case with changed facts is always problematical (and the facts of no two cases could be absolutely identical). It is here that one can do no more than predict, be he skilled lawyer or legal layman. In a subsequent case one side will endeavor to prove that the facts are so little different from a previously decided case that the same decision should be rendered in the instant case. The other side will argue that the differences in fact are indeed substantial enough to cause a different ruling.

A fourth essential knowledge about the judicial system is that in deciding cases, courts are guided to a large extent by available "precedents" (rules for deciding cases established by courts through the years). Hence, a certain element of stability is incorporated in the judicial process. Also, elaborate appeal channels are set up. Higher courts in effect supervise the decisions of lower courts and are empowered to reverse the judgments of lower courts.

A fifth important understanding is that in theory the courts' function is to interpret the law, not to make it. Thus, within limits, the legislative branch can negate the future effect of a judicial decision by changing the law which was the basis of the decision. Of course the law must be changed in a manner that is not unconstitutional, or the courts will be able to set aside the new law.

7. The "competing consideration" ap-

proach to legal issues. Contrary to popular lay opinion, the law on most matters is not precise. Many statutes which seem to be concrete are not. For instance a teacher can be dismissed for "incompetence" in any jurisdiction; but whether specific actions constitute "incompetence" is a question for the courts. Also it is clear in the common law that a teacher may be required to respond in damages to a pupil injured through the teacher's negligence; yet whether a specific act is negligent cannot be ultimately determined except through court decision. If the law were as simple as so many legal laymen think it is, there would be little need for highly trained, experienced, intelligent lawyers and judges. Clerks (or even mechanical brains) could match cases with legal rules and have the decisions dropped from a slot.

The question, Is such-and-such legal? generally cannot be answered categorically. Theoretically it could not be answered with finality until ruled on by the highest court having jurisdiction over the matter. Indeed the situation makes the discipline of law much more akin to that of education than most educators realize. Generalizations can be drawn from decided cases, but as in education, differences in individual cases often preclude direct application of general propositions to specific circumstances.

The basis of prophecy as to the likely outcome of a case which may arise is a weighing of the "competing considerations" involved. In some situations, the considerations favoring the likelihood that a court would enter one judgment seem to outweigh greatly the factors favoring the opposite judgment. In other circumstances, the balance appears to be more nearly even. The decision as to whether to pursue a course of action should be made after contemplating the

legal eventualities and taking into account non-legal factors, such as educational and social aspects. In many circumstances, the way that something is done determines its legality; that is, a particular goal achieved in one way may be legal and in another way illegal. Therefore, the legally alert educator will take the path most likely to be sustained in the eventuality of a lawsuit. Furthermore, he will be prepared to answer the legal arguments of those who oppose the action.

8. *Basis of authority in school law.* In regard to any item of concern, the effective educator will look for the basis of authority for the prevailing legal situation. His actions if he wished to change a legal situation created by the Federal Constitution should be quite different from the procedure followed if the legal basis were the regulation of a local administrator. At first glance this point seems completely obvious, yet many educators want to be told specifically whether or not they can do a certain thing. This encourages an uncritical acceptance of statements regarding what the law is on a point. It has already been indicated that, although in some instances a precise answer can be given, definite answers should be accepted with caution. The follow-up question should always be, What is the legal basis for the answer? For example, if one wished not to comply with a United States Supreme Court interpretation of the Constitution, he would have either to convince the Supreme Court that it had erred in its decision and should reverse itself, or to have a constitutional amendment enacted. On the other hand, the provisions of a state statute could more easily be changed, and a local board of education regulation changed still more easily. If the basis of the contrary authority is revealed to be no

more than an interpretation by someone in an administrative position, as is often true, there may be no need to have any legal change made before the action can appropriately be taken. Also, as mentioned previously, some statutes now included in school codes would probably be declared unconstitutional if they were challenged, and unquestionably many board of education rules and regulations would likewise not be enforceable in courts.

The legally effective educator should ask himself, therefore, whether he is willing to be blocked on some proposed educational action by the law as interpreted, or should take political steps to have the law changed, or should proceed with his plan and rely on support from the courts in the event that his educational action is challenged. He would want to consider what penalty might be forthcoming if his action were not sustained by the courts. If he could prove that the statute in question is unconstitutional, or that the local board rule is unreasonable, or that the interpretation of the state superintendent of schools is wrong, no legal penalty would result. Intelligent action on a matter often hinges on this point of the basis of authority. If a teacher or a schoolboard is convinced that something should be done in the interests of better education and the statement is made that it cannot be done legally, immediate thought should be given to the legal path to be followed in order to make the educational goal possible of attainment.

9. *Specific emphases to meet individual needs.* A minimum of knowledge by all engaged in the field of education would be required in such substantive areas as: legal structure for education, pupil personnel policies, control of pupil con-

duct, staff personnel policies, curriculum (broadly defined), and liability. Advanced preparation beyond that required for entrance to the profession would follow two paths: pursuing more deeply the field of school law as part of the general advanced training requisite for better professional effectiveness, and delving deeply into legal areas particularly pertinent to specialized interests. As illustrations, physical education coordinators should be expert in liability for pupil injuries, those entering guidance work would need more familiarity with compulsory education laws and their enforcement, curriculum coordinators would require extra knowledge of the rights of parents in relation to school studies and activities, business administrators would need considerable work in the area of contracts, personnel administrators would need to know more about the legal aspects of employing and discharging teachers, and those specializing in history or philosophy of education would want to be familiar with the rich source of history and philosophy found in judicial opinions.

10. *Sources of assistance in resolving school law matters.* An educational leader must have a rudimentary knowledge of how to use a law library so that he can utilize primary sources—constitutions, statutes, and judicial interpretations. A great handicap to effective use of the law in education is that too few educators know how to use primary sources and must rely on summaries and interpretations, always abbreviated or paraphrased rather than complete, and sometimes made by individuals not qualified to make them. One does not have to possess a law degree or be a member of the bar to understand the substance of most statutes and court opinions related to educational matters any more than he has to be a

licensed physician to understand most reports on prevention of the common cold. This is not to imply, of course, that one should try to be his own lawyer or physician.

Also available in law libraries are key secondary sources which analyze and summarize specific points. The fact that these are written primarily for lawyers makes them no less valuable to the educator possessing the knowledges discussed under the preceding nine points. The educator is looking for a general orientation; he is not preparing a brief in technical legal style. Many procedural questions are essentially for the lawyer. Substantive educational matters, however, treated by statutes or discussed in opinions of courts are understandable to any reasonably intelligent individual.

Other sources of assistance for the educator comprise books written in the area of school law. These tend to summarize and discuss issues from the perspective of the educator. Like writings in any other field, they are of uneven quality, some being clear, accurate, and helpful and others being oversimplified or even misleading. The educator who has the above knowledges will be able to distinguish the good volumes from the poor ones.

In every state the state department of education in one way or another provides guidance on school law matters. Some states are better equipped to do this than are others, but the functions of a state department of education include enforcing the school laws of the state and assisting local districts to comply with them.

An effective local board of education or education association will have available the resources of an attorney skilled in school law matters. Dependent on the size of the district or association and the amount of work, the lawyer may be employed full time or on a retainer basis. A

word of caution should be given here. Merely because someone is a member of the bar does not mean that he is well-qualified to give the kind of legal guidance needed by a school system or an education association. The selection of a school board or education association attorney should be made with great care, for his influence will be considerable.

It is hoped that the above ten essentials, offered with the admonition that the list is not all-inclusive, may constitute an approach to answering the question, What should educators know about school law? Many of the reasons for this knowledge have been implied in the foregoing. Four are outstanding, however, and seem to warrant explicit statement. First, educators must equip themselves with the knowledge of the law necessary to accomplish a basic function of the profession—passing on to children the Amer-

ican heritage and helping them to appreciate and improve our way of life within a government of laws. Second, as a matter of enlightened self-interest, educators should know their rights and their responsibilities. They should know enough to prevent unnecessary legal difficulties and thereby save time, money, and mental anguish. Third, as a matter of enlightened professional interest, educators should know enough law to improve the professional status of their occupation—a status greatly dependent upon the law. Fourth, and most important, there is a need for intelligently assessing the legal bases of both everyday and long-range educational policies. Educators must help to make the law work as an instrument in the progress of education. This can be done only if they know enough about school law to communicate effectively with those whose profession is law.

The Spirit of American Education*

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AT THE present time in the United States there is widespread criticism of the public school. It is charged that the school is neglecting the "fundamentals" of reading, writing, and arithmetic; that it has abandoned the time-tested methods of drill and recitation; that it has exchanged the rigorous discipline of the past for the "soft pedagogy" of the Progressives; that it has placed a premium on mediocrity; that it has failed to inculcate habits of work and industry; that it has slighted the teaching of facts; and that it has introduced children to the study of controversial social issues beyond their understanding. More seriously, it is charged that the school has neglected the teaching of moral and spiritual values, encouraged juvenile delinquency, weakened the moral fibre of our people, and therefore contributed to an alleged general condition of "moral disintegration" marking our society in the present epoch. Some of the critics hold John Dewey and his followers, including the present speaker, responsible for this "deplorable" condition.

The fact, however, is that such criticisms have been directed at the public school from the day of its origin, and even before. Without granting the justice of the charges, we should realize that they

are responses to certain deep-lying traits of American life and genius. Throughout the history of the Republic, visitors from other lands have noted the lack of respect for authority and elders on the part of our children. Thus, in 1837, twenty-two years before John Dewey was born, Francis J. Grund, a German-educated American citizen, made the following observation: "There is probably no better place than a school-room to judge of the character of a people. Who, upon entering an American schoolroom, and witnessing the continued exercises in reading and speaking, or listening to the subject of their discourses, and watching the behavior of the pupils towards each other and their teacher, could, for a moment, doubt his being amongst a congregation of young republicans?" He then added, "And who, on entering a Germany academy, would not be struck with the principle of authority and silence, which reflects the history of Germany for the last half dozen centuries? What difficulty has not an American teacher to maintain order amongst a dozen unruly urchins; while a German rules over two hundred pupils in a class with all the ease and tranquillity of an Eastern monarch." He concludes his discussion with the warning directed beyond the Atlantic that "it would only be necessary to conduct some doubting European politician to an American schoolroom, to convince him at once that

* This is the fourth and final lecture in the series on "Education for a Society of Free Men in the Technological Era" delivered by Dr. Counts in Brazil in 1957.

there is no immediate prospect of transferring royalty to the shores of the New World."

Sir Charles Lyell, the great English geologist, on his visit to the United States in 1845, lamented the undisciplined behavior of American children and made a like observation: "Many young Americans have been sent to school in Switzerland, and I have heard their teachers, who found them less manageable than English or Swiss boys, maintain that they must all of them have some dash of wild Indian blood in their veins. Englishmen, on the other hand, sometimes attribute the same character to republican institutions."

Grund and Lyell were making both a commentary on education in general and an observation on the impact of American life and institutions on the school-room. As I have maintained throughout these lectures, education, unless it is imposed from without, always constitutes a response to the traditions, the value commitments, the life conditions, and the genius of a people, influenced of course by the prevailing factors of power in a society.

The American educational scene is marked by great diversity and even by many contradictions. It has been said that the United States has no educational system, that within the borders of the country can be found almost any practice the inquirer may seek. It is a land of vast expanse, characterized by great differences in climate, resources, economy, and cultural tradition. In a single brief lecture, therefore, it will be possible to deal with only a few of the basic features of American education. The emphasis consequently will be placed on the public school, even though private schools from the kindergarten to the university are present in considerable numbers. At the higher level in particular the most famous

institutions are conducted as private corporations dependent on the largess of wealthy patrons. We shall begin with the factor of control and then proceed to an examination of a few of the more characteristic expressions of the American spirit in the conduct of the schools.

II

In the sphere of control authority in the last analysis rests with the people. In spite of the intervention from age to age of privileged groups and classes, whether founded on religion or property, this has always been so. Education in the United States has never been imposed from above. First as colonists along the Atlantic coast and later as pioneers in the wilderness of the interior, the people carried their institutions with them wherever they cast their lot. It was in this way that they established their schools, each community or settlement doing as it saw fit. No great statesman, no priesthood, no intellectual class, no committee of wise men, no centralized government devised the American system of education. With whatever merits or defects it may possess, it is the authentic work of the people, with of course the assistance of inspired leaders. Almost universally the conduct of elementary and secondary schools is in the hands of local boards of education chosen in some fashion by the citizens of the community. The boards which control higher schools and universities are ordinarily somewhat further removed from the citizens, but even with them, at least in the case of public education, the contact is fairly close. The development of public education in the United States consequently rests on a sublime faith in the wisdom and virtue of the people.

A word should perhaps be said here about the origin of our people. What is now the United States was populated by

the greatest migration of history. From the first colonial settlements, at the beginning of the seventeenth century, down to the present time something like forty million men, women, and children crossed the great oceans to make their homes in this land. Moreover, from beginning to end this great migration was essentially a migration of common people—common in the sense that they were without wealth or social rank. In fact the records show that they came overwhelmingly from the poor, the oppressed, and the persecuted of the Old World. In the colonial period, well over half of the immigrants came as bond servants or Negro slaves. The number of criminals cast on the shores of the thirteen colonies by the mother country far exceeded the renowned migration of English Puritans. To this broad generalization regarding the source of the American people, there are of course many individual exceptions, but the exceptions were generally unsuccessful in the attempt to transport their conceptions of social relations to the New World. As a consequence, feudal institutions and traditions never took root in the colonies. Here, without doubt, is one of the most important and decisive factors shaping the history of the American people. The idea prevails to this day that America is a land without social classes; and anyone who seeks to arouse class antagonisms or even to speak of classes is generally regarded as un-American. It was thus the poor and underprivileged of other countries who in the last analysis built the American Republic and fashioned the system of public education.

In educational matters the people exercise control, for the most part, through state and local boards of education. It should be recalled that when the American Union was formed in the latter part of the eighteenth century the thirteen

colonies which entered into the federation regarded themselves as independent states and were exceedingly jealous of their sovereignty. It was in fact only with the greatest difficulty and by means of shrewd political manipulation that they were persuaded to relinquish a portion of this sovereignty and accept membership in the Union. In those days there was a general mistrust of any government far removed from the governed; moreover, whether that government was located in London or in some American city seemed to many a sturdy champion of local rights a matter of little importance. As a consequence, the powers of the Federal Government were carefully listed in the federal constitution, which formed the basis of the Union; and, according to the provisions of the tenth amendment to this document, all other powers were "reserved to the states respectively, or to the people." Since education was not mentioned in the constitution, it thus came to be regarded as an exclusive interest of the separate commonwealths.

Although the Federal Government has played a role in the development of certain aspects of American education and although, ever since the Civil War, organized efforts have been made to secure substantial federal funds for the support of public education, the school remains to this day essentially a function and a responsibility of the individual state. Opposition to federal control is deep-rooted and is shared even by those who seek federal support. According to the American point of view, education is too powerful an instrument over the mind to be placed in the hands of any single authority. The citizens fear that the central government, if it had administrative control over the schools, might fall under the influence of some unscrupulous minority and that the entire educational sys-

tem from one end of the country to the other might be employed to keep this minority in power and to indoctrinate the coming generation with some authoritarian social philosophy.

Basic to the American system, therefore, is the fact that the individual state is the primary legal authority in the field of education. Yet this statement conveys only a part of the picture. Within the state the local community rather than the central authority has always played the major role in the support, control, and general conduct of the public school. While enforcing minimum standards, promoting diverse limited objectives, and providing a measure of leadership, the state commonly delegates its authority under the federal constitution to the local community. It is in the locality, therefore, that the process of shaping public education is concentrated. And here the people, operating within a framework of traditions, laws, and judicial pronouncements, make decisions governing the establishment and the conduct of their schools. The people do not discharge these functions directly, however. By one means or another, but commonly through popular elections, they create small lay boards of education to which their authority is delegated. It is assumed that at the time of election the broad issues confronting the schools will be thoroughly discussed by the electorate, and that the board members will be chosen on the basis of both their personal qualifications and their announced positions on the issues. It might be assumed further that during their term of office the board members will meet at stated intervals and, free from the pressure of special interests, make decisions respecting the conduct of public education in accord with the expressed mandates of the people.

In actual practice, however, the situa-

tion is quite different. In the first place, a large proportion of the people seem to have no interest in education and fail to participate in elections. At the same time, the board of education is rarely permitted to deliberate in solitude, insulated between elections from the play of social forces. And here we encounter a major political reality in the United States. In his study of the American democracy published in 1835, in the period of pre-industrial society, Alexis de Tocqueville observed with astonishment the tendency of Americans to form voluntary organizations. "Americans of all ages, all conditions," he wrote, "constantly form associations. They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds—religious, moral, serious, futile, general or restricted, enormous or diminutive. . . . If it be proposed to inculcate some truth, or to foster some feeling, by the encouragement of a great example, they form a society. Wherever, at the head of some new undertaking, you see the government in France, or a man of rank in England, in the United States you will be sure to find an association." And so it is today. The battles over the launching and the development of the system of public education in all of its aspects and departments have been conducted by these voluntary and private associations. It is in this way that the active and articulate elements among the people make their views known on every conceivable aspect of education. It is thus in a situation seething with conflict, controversy, and pressure that decisions are made. All of this is in the spirit of American democracy.

III

The controlling ideas and motivations in American education are many and con-

tradictory. The following five, however, will be briefly developed in this lecture: the doctrine of equality, the drive for individual success, the devotion to practical utility, the spirit of pragmatism, and faith in the perfectibility of man. Although each of these ideas or motivations is often observed in the breach, they are all authentic elements in the total spirit of American education. They all have their roots in the long experience of the American people.

At the very base of the theory of education in the United States is a profound faith in the potentialities of the individual human being. Although this faith has been shaken in the twentieth century by the advance of industrialism, the appearance of a highly complex social order, and the results of biological and psychological investigation, the Americans continue to believe in the essential equality of men. They still stoutly maintain in the language of their radical forefathers that the individual is a product of the total influences which play upon him from birth to maturity, and that inequalities are to be explained chiefly in terms of differences in opportunity and of injustices perpetuated by social institutions and conventions. This doctrine, which may be traced to the French philosophers of the period of the Enlightenment, found eloquent expression in the American Declaration of Independence in 1776. Moreover, the citizens of the young republic were revolutionists and, like all revolutionists, had unlimited faith in the power of the environment to transform the individual. They also believed that the conception of equality as a moral idea is one of the truly sublime ideas in the history of the race.

The idea was supported by the great experience of the migration from beyond the Atlantic and across the continent to

the Pacific. Here, in an untamed land devoid of historical tradition, whatever artificial social distinctions may have survived the leveling process of migration rapidly melted away. When a man entered this strange new world he was forced to leave his ancestry and family behind him. Indeed, as we have seen, the vast majority of them had no ancestry of distinction or family of social rank. The Americans are ever fond of declaring that their own history is a living refutation of the claims of superiority advanced by privileged classes. Thus the ideas of democracy and popular rule were born. We have an old saying: "One man is just as good as another, if not a little better."

The idea of equality, which is perhaps the most basic idea in democracy, has had a profound impact on the American system of education. It was responsible for the establishment of the *free* school without tuition charges and the *common* school attended by children from all elements of the population. It was also responsible for the development of the *single* educational system—one of the most magnificent achievements of American democracy. Except for the private schools which are permitted under the conception of liberty, the dual system developed in Europe, with its abbreviated program for the masses and its rich offering for the upper classes, has never taken root in the United States, except in the case of the Negro in the southern states, which constitutes our most severe violation of the democratic principle. The sequential organization of institutions, consisting of primary, secondary, and higher schools, is theoretically open to all elements of society and is commonly regarded by the Americans themselves as *their* system of education. The exceptions which exist are usually brushed aside as unimportant or irrelevant.

Another expression of the idea of equality is found in the organization of the public high school. During the early part of the present century, when the program of secondary education was expanding, the introduction of the more practical subjects pointing directly to the vocations precipitated a vigorous controversy regarding the form that the high school should take. Some argued in the name of efficiency that the different interests should be housed in different buildings and be provided with different managements; others argued in the name of equality that all of these interests should be brought together in one institution. According to the first proposal, the secondary school system of a large town or city would include a series of specialized schools, while, according to the second, it would consist of a single type of comprehensive school organized in sufficient numbers to meet the demand for adolescent education. Although both plans have found expression in America, the second is the more popular and seems to have triumphed. The typical secondary school in the United States is consequently an institution which embraces within its program the entire range of subjects from auto mechanics to Latin and from painting to trigonometry. It also enrolls among its pupils children from the most diverse cultural backgrounds and the most varied vocational and academic interests. The decisive consideration seems to be that the comprehensive high school serves the principle of equality by prolonging into the period of adolescence the common associations provided by the public elementary school. It thus constitutes an extension of the idea of the common school.

A second controlling conception in American education is that of individual success. Indeed there is probably no prin-

ciple that is more characteristic of the American mode of life and that has played a larger role in shaping the educational system. It is closely associated with the idea of equality. Even democracy tends to be identified with a species of individualism and the good society is regarded as one in which the individual is given an opportunity to succeed according to his industry and talents. Eminent statesmen and university presidents, as well as more humble citizens, vie with each other in praising the social order which permits the individual to rise above the station into which he was born. One is reminded of the "circulation of the elite" of Gaetano Mosca. To the Americans the world is an arena and life is a race. And they are less inclined to inquire after the nature of the stakes than they are to ask whether the conditions are fair and the best man (or the best woman) wins.

Although success has been defined by diverse standards in the course of American history, the primary urge which has moved Americans to display that restless energy so characteristic of them has been the desire for economic advancement. Where hundreds or perhaps thousands came to America for religious and political freedom, millions came to improve their economic position. And after their arrival the conditions of life and the very atmosphere of the New World directed their attention increasingly toward the attainment of material success. They found themselves in a country in which the achievement of riches on a fabulous scale was within the realm of possibility. "We are born in haste," said an American writer long ago with pardonable exaggeration, "we finish our education on the run; we marry on the wing; we make a fortune at a stroke, and lose it in the same manner, to make and lose it again ten times over, in the twinkling of an

eye." The ideal of individual success has consequently come to be defined in material terms. Statistical studies have been made in America to prove that every day in school is worth so much in dollars and cents.

The establishment of the "free school" and the construction of the "educational ladder" were undoubtedly motivated by the desire to give the individual a chance to succeed in the American pattern. A glance at educational statistics in this connection will be of interest. The number of pupils in the upper four years of the secondary school has grown from approximately 300,000 in 1890 to over 8,000,000 in 1957. The corresponding figures for the higher schools are 110,000 and 3,400,000. I would like to believe that this phenomenal growth in about two generations expressed a desire on the part of the younger generation to become better citizens and to advance the arts and sciences. The explanation, however, undoubtedly lies in another direction. In 1890 the Bureau of the Census announced the closing of the geographic frontier—the very symbol of economic opportunity in the early America. At the same time the country was moving swiftly along the road of urbanization and industrialization toward a new civilization requiring formal schooling for many occupations. This upward surge of the masses into the higher levels of the educational structure, which can only be viewed in the nature of a profound social movement, seems to have been motivated by a desire for individual material success. At great sacrifice parents have struggled to "give their children an education" so that they might improve their social position and be freed from the necessity of hard physical labor. And now hard physical labor is being eliminated by the intervention of electronics and automation. And one of our fore-

most students of the developing American economy said not long ago that the economy of the future will place a premium on "brains."

Another striking instance of the triumph of the individual is found in the administration of the high school program of studies. An observer, noting the numerous curricula carrying vocational titles, would naturally conclude this implied a high degree of specialization. On closer examination, however, he would find himself in error. The subjects offered do indeed cover a very wide range. Also they are organized in specialized sequences, but many pupils do not follow them. They tend to experiment with this field and that, shifting from one specialization to another. And they do this without sacrificing their standing in relation to graduation. The rationale of this strange practice is found in the conviction that the future should always be left open. If a pupil, after having begun the pursuit of one of the more practical courses, should change his mind and decide to go to college, he and his parents would resent bitterly any effort on the part of the educational authorities to require him to begin a new series of sequences in the first year of the high school.

Devotion to practical utility constitutes a third and closely related ingredient of the spirit of American education. The American people from the beginning have been a practical people; they have been primarily concerned with the task of making a living and raising ever higher the standard of living. Coming originally for the most part from the "uneducated" classes of Europe they have had no great love of "book learning" as such or for the pursuit of knowledge for its own sake. In the earlier epoch they were engaged in felling forests, breaking virgin lands,

erecting dwellings, and the physical conquest of a continent. More recently they have been engrossed in the building of railroads, the exploitation of mines, the construction of factories, the manufacture of goods, and the sale of merchandise. This preoccupation with practical affairs has left its mark on the system of education.

Perhaps the most striking expression of the principle and practical utility is the placing of control of education in the hands of practical men. With the exception of the colonial period, when the voice of the clergy generally ruled the educational councils, it has always been so. During the agrarian era educational policy, at least as it affected the lower schools, was determined almost altogether by small boards composed of untutored farmers and rural artisans. But with the rise of industrialism and the development of cities, control of the public school at practically all levels gradually came under the influence of the powerful commercial, financial, and industrial classes. The successful businessman therefore is the arbiter of educational enterprise in the United States today and is chiefly responsible for the practical turn given to the program. Since the days of Benjamin Franklin, he has had visions of a system of schools repudiating the narrow academic tradition of the clergy and the landed aristocracy and articulating unashamedly with the needs of industry, agriculture, commerce, and everyday life.

The result has been a revolution in secondary and higher education during the present century. One expression of the revolution is the vast expansion of enrollments already noted. Another is the transformation of the program of studies. The classical tradition which flourished through the centuries is but a pale shadow of its former self. Greek has all but dis-

appeared from the high school, and Latin has had to retreat before the advance of modern studies. Even the humanities as a whole have encountered and do encounter great difficulty in maintaining themselves. It is the sciences and technologies which practical men have fostered. Along with all of this has gone a general downgrading of disinterested intellectual achievement in America. To be sure, if such achievement gives promise of immediate utility, it is both highly prized and highly remunerated; but there is little store placed on that vast erudition in recondite fields which is the traditional possession of the scholar. At the same time education is extremely sensitive to social pressures. Programs of study are in perpetual flux. The public high school or the state university will teach almost any subject for which there is an organized demand. Either will also respond to those gusts of passion which in times of crisis sweep over the people.

A fourth influence which permeates American education from top to bottom, as well as American life and institutions in general, is the pragmatic or experimental temper. It is not by chance that John Dewey significantly developed the philosophy of pragmatism. Born in 1859 on the frontier in the State of Vermont, he later gave expression in his thought to the spirit of his people. Indeed he could have appeared nowhere else in the world. While he always had his critics in the United States and while his ideas are being attacked vigorously today in certain quarters, he remains a most authentic expression of American genius.

The pragmatic or experimental temper was bred in the American people from generation to generation by experience and circumstance. The great migration across the Atlantic and on to the Pacific practically compelled the development of

this temper. All immigrants to a new and strange land invariably leave many of their possessions, both material and spiritual, behind them. This is particularly true if they migrate, not as complete social and cultural groups, but as individuals and families, as the migrants to America came. They had to break with the past again and again, moreover, as they moved westward. The fact that they came from diverse lands and cultures was another important factor in compelling them to adjust, adapt, and invent. "The Europeans, on coming to America," Tocqueville wrote in 1831, "left behind them, in large part, the traditions of the past, the institutions and customs of their fatherland; they built a society which has analogies with those of Europe, but which at bottom is radically different." As this brilliant Frenchman traversed the Mississippi valley he was moved to employ still stronger language. "It's here," he said, "one must come to judge the most singular state of affairs that has doubtless existed under the sun. A people absolutely without precedents, without traditions, without habits, without dominating ideas even, opening for itself without hesitation a new path in civil, political, and criminal legislation; never casting its eyes about to consult the wisdom of other peoples or the memory of the past; but cutting out its institutions, like its roads, in the midst of the forests." There is of course exaggeration in these words. But they express an essential element in the American approach to life.

Our educational system, while it has analogies with the systems of Europe, is unique. We have not hesitated to borrow institutions and ideas from other cultures, but we have always adapted them to our situation and values. And today in America it is possible to win support from some quarter for any new educational idea.

A fifth and final ingredient of the spirit of American education is faith in the perfectibility of man and his institutions. In fact this is the basic presupposition in our faith in education. Though this faith has often been naive and superficial, as I contended in a previous lecture, it is nevertheless one of the great faiths of the human race. It was a faith of the foremost founders of our Republic in 1776, 1787, and the succeeding years.

The powerful movements for intellectual and political liberation which swept over the Old World during the sixteenth, seventeenth, and eighteenth centuries were given a friendly reception in America. A distinguished French historian has said that the ideas of the Enlightenment took deeper root here than in France. Of these ideas, perhaps the most revolutionary was that of human progress and the indefinite perfectibility of man and his institutions. This idea found its natural home in America. The proposition that the future can be better than the past is an essential and distinctive part of our heritage. Although it may foster an irrational optimism and may be narrowly interpreted as material or mechanical advance, it is one of the great liberating ideas of history. Even our most conservative interests always claim to be battling in the name of progress. It was said long ago that "the Americans *love* their country, not, indeed, *as it is*, but *as it will be*. They do not love the land of their fathers; but they are sincerely attached to that which their children are destined to inherit. They live in the future, and *make* their country as they go on."

They believe that faith in the powers of man is no idle and meaningless faith. In spite of the many reverses and catastrophes of history, it affirms that the story

of man's long adventure on the earth is glorious and full of promise; that indeed the achievements already in the record almost pass understanding. Though knowing well that peoples without number have enslaved or destroyed one another, that civilizations often have risen only to fall in ruins, that the nations of the world are now torn by strife and hatred, and that evidences of relapse into barbarism may be seen around us today, it rejects all philosophies of pessimism. It rejects alike the doctrine that the golden age of man lies in some mythical past and the doctrine that it is to be found only in some other sphere of being where we shall be freed from all our earthly tram-

mels. It also rejects the doctrine that man, like the squirrel in the cage, is destined to move forever in circles, repeating from age to age an essentially uniform pattern of existence. At least it finds in man's rise out of primordial "ooze and slime" to his present state sufficient grounds for hope that he will be able increasingly to become master of his earthly destiny. And this hope is grounded on faith in that "divine spark of reason" which distinguishes man from the brute. The American people believe today, with Jefferson, that education, appropriately conceived and administered, is an indispensable instrument for improving the nature and condition of man.

Linguistics and Language Teaching*

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THE pursuit of knowledge within a discipline requires a close tie to prevailing intellectual modes if the pursuit is to produce currently acceptable findings. Scientific method is today's prevailing intellectual mode, and it has profoundly affected the study of language phenomena.

SCIENTIFIC METHOD AND LINGUISTICS

Scientific method is not indispensable to insight. Most theories credited to scientific method have their early forerunners. Aristarchus of Samos is the Copernicus of antiquity; Panini, the Sanskrit grammarian, is the ideal linguist of an earlier antiquity. Today conceptual theories still come through an unexplained leap by an inspired mind.

The advent of scientific method has, however, habituated scholars to controlled observation and testing preceding and following theory formulation. The result of these habits has been a separation of superstition from those beliefs which give deeper understanding, whether the topic be linguistics, witches, or atomic physics. These habits have also made it possible

for large numbers of scholars to move ahead in any area of endeavor, proliferating, in the case of linguistics, Panini-like advances.

RISE OF PRESENT-DAY LINGUISTICS

Language has served as a subject for learned comment for a long time. Some linguists have tried to separate scientific endeavor in language study from learned but nonscientific endeavor by using the term "linguistics" for the former and "philology" for the latter. These terms are more convenient than fair, but they indicate something of the linguists' data and of their concern about attitude toward those data. Linguists are not necessarily people who study more than one language. They are scholars whose approach to linguistic data is usually circumscribed by established scientific techniques which have developed in various specialized fields of linguistics.

The development of systematic approaches to data in several branches of linguistics encompasses the last one hundred and fifty years. The main branches rose in reverse order of what would be considered desirable today; namely to have thorough structural descriptions of languages before beginning comparative or historical studies. But early in the nineteenth century, before any appreciable development of descriptive or structural

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techniques beyond what had been inherited from the ancients, detailed techniques were developed for comparative studies. These culminated in the unequivocal establishment of genetic relationships among language "families" and laws of sound correspondences between languages. Later developments brought corresponding techniques to the study of historical change in language. From this developed the contention that linguistic laws have no exceptions. Establishment of procedures for Linguistic Geography was the next development. Finally, well into the twentieth century, principles and procedures for Structural Linguistics were enunciated. The primary concern of structural linguistics is the isolation of those formal features of speech which signal linguistic meaning.

PROCEDURES IN STRUCTURAL LINGUISTICS

Structural linguists are interested in making scientific observations and tests which lead to and follow the formulation of hypotheses on the relationship of linguistic forms one to another. Many linguists produce an operational method of analysis that can be applied to all data the worker has at hand.

There are procedures which will help an analyst reach conclusions regarding the structure of the vast range of sound which exists in every language and procedures which will help him to find word types. There are also procedures which will help him to identify types of word groupings.

A single illustration must serve here. Suppose we want to make generalizations about the italicized portions below:

1. He *called on* his old friend.
2. He *put on* his old coat.
3. He *called up* his old friend.
4. He *waited for* his old friend.

We can say that these two-word groups all fit into a spot that is the same relative to the other parts in the sentence pattern presented here. We can then use a conversion technique which highlights a patterned stress and intonation difference:

1. His old friend is the one he *called on*.
2. His old coat is the one he *put on*.
3. His old friend is the one he *called up*.
4. His old friend is the one he *waited for*.

We can now make a generalization about items 1 and 4 which is different from that for items 2 and 3. By further use of a substitution technique we find that additional differences appear in our new subclasses:

1. He *called on* him.
2. He *put it on*.
3. He *called him up*.
4. He *waited for* him.

A more nearly complete description of the two subgroups is now possible. Items 1 and 4 represent an inseparable group; 2 and 3 a separable one. The same procedures and related ones may be applied to any subdivisions of language, including parts of speech.

These procedures are the linguist's tools. The material with which he works is always open to examination and measurement with his tools. He cannot rely on simple authoritarianism. If not all data fit his classifications, he lists as unresolved residue those that do not fit. They cannot arbitrarily be assigned to "error," "exceptions," "idioms," and "adverbs." If subsequent work requires a new classification of data, it is regarded less as a new attack upon the sacred categories which were good enough for father, and more as a further step toward ever greater understanding and greater wonderment at the not yet understood.

This is an open-ended approach to generalizations which does not quickly or easily relegate active structures to a

category of unclassified residue, but classifies the less frequent and the less widespread structures as well as the dominant ones. It has required the development of the concepts of dialect, "idiolect" (speech characteristic), and levels or areas of usage as it has required an enlightened and enlightening structural treatment of formerly neglected areas.

ASSUMPTIONS AND FINDINGS OF LINGUISTICS

The assumption that language is structured is basic in the work of the linguist. Following this he can proceed to identify and describe formal features of a language which, he believes, recur with information-signaling function. The description of these forms constitutes the functioning units for the language. Speech is the primary form of language wherein he can identify these units on phonological, morphological, and syntactical levels whether the language be Chinese or English. Speech invariably provides many more identifiable signaling features than any commonly used orthography.

Linguists also find that linguistic reactions are largely matters of habit. A single illustration must suffice to exemplify the analysts' isolation of these habits. In regular plural formation of nouns and third person singular formation of verbs, the speaker of English adds an extra syllable [əz] to words that otherwise end in a sibilant [s, z, ʒ, ʒ̥, ʃ, ʒ̥]. An [s] is added to words that end in any other voiceless consonant [p, t, k, f, θ]. [θ] is relatively rare and [h] doesn't occur at all as a voiceless sound in syllable final position. All others, that is, words that end in a non-sibilant voiced sound, are spoken with a final [z] in analogous circumstances. The speaker produces these variations habitually and usually below the level of awareness. The writing system

does not make all of the observed distinctions of speech. The three variations illustrated above each form part of two signaling units on the morphological¹ level (plural or third person singular as illustrated contrastively in "cars" vs. "car" and "reads" vs. "read"). These variations together illustrate three signaling units on the phonological² level of analysis ([s], [z], and [ə]) as illustrated contrastively in "seal" and "zeal" and in [pred] "prayed" and [pəred] "parade").

It is in the nature of linguistics to submit all raw language data to scrutiny in accord with accepted scientific procedures. The linguist observes, he sets up hypotheses, and through crucial experiment or systematic and controlled observation of language, he gathers data which will reinforce or refute his hypotheses, very many of which have to do with the identification of those features of linguistic form to which he can attach an information-bearing role.

LANGUAGE TEACHING

The teacher who wants to give students a new freedom in the form of ability to use new language forms will clearly be concerned with the language to be taught. He must know the language in two ways: he must be able to use it well in communication and he must know it descriptively.

How the teacher goes about teaching a new language, or the unfamiliar forms of an already learned language, depends largely upon the relative value that the teacher assigns to the use of description and to the use of habit-forming devices. The application of the findings of linguistic science constitutes a different discipline from linguistics proper. In the past,

¹ Eugene A. Nida, *Morphology* (Ann Arbor, University of Michigan Press, 1949).

² Kenneth L. Pike, *Phonemics* (Ann Arbor, University of Michigan Press, 1947).

some linguists condemned older approaches to foreign-language teaching on the ground that traditional grammarians gave us scientifically unsound statements about language. Some linguists and teachers proceeded to substitute for such statements other statements derived from the use of scientific method applied to analysis of language material. This, of course, does not constitute so much the application of the findings of linguistics as it does the substitution of one set of philosophical descriptions for another set.

For effectiveness, the language teacher must be allowed to feel less responsible for communicating or transferring his descriptive knowledge of the linguistic structure and he should feel more responsible for developing new habits of oral-aural responses—and this includes a different unitizing of the learner's nonlinguistic experiences.

VALUE OF LINGUISTICS FOR LANGUAGE TEACHING

The value of linguistics for the language teacher does not arise primarily from any new method. The linguistics-oriented teacher uses an oral-aural approach which has proved to be productive in mastering a language. But the "natural method" antedates this approach by decades. Actually, the oral-aural approach is not considered a method at all. Teachers and linguists think of it rather as an emphasis for early stages of language learning.

The teacher with a background in linguistics emphasizes habit-developing practices because he believes that language is constituted of arbitrary systems in which the individual finds his habitual symbolic responses. This is a valuable emphasis. But since at least a few teachers have used practices of this type, published decades ago, neither can this emphasis be

claimed as an innovation deriving from recent scholarship in linguistics.

The innovation, and the biggest contribution, lies rather in the area of the structural analysis of languages and in the systematic comparison of structural analyses of target languages and background languages of students as the primary basis for the selection of those new habits of language response which are to be taught. This comparison may very often suggest the ordering and the manner of presentation as well. It is in this area of contribution that we find the outstanding gains in effectiveness of language teaching.

NEWER TYPE EXERCISES AND LABORATORIES

Linguists and teachers with a linguistic background were not the first to use an oral-aural approach nor were they the first to use habit-developing exercises with a minimum of pseudo-philosophical explanation. They were not the first to insist on language in linguistic and situational contexts which approximate normal ones likely to be encountered by the student nor were they the first to require a degree of accuracy in student language work. Because of their emphasis on all of these, however, they may well be credited with introducing some valuable refinements.

Noteworthy teaching successes stand as monuments to the productiveness of these emphases and to the value of the systematic comparison of linguistic structures. Exercises which combine these requirements commonly consist of a series of patterned responses given by students to a teacher's cues. This may be like a series of short guided teacher-student conversations after the initial presentation and teaching are completed and the pattern has been set up.

Laboratories provide the best opportunities for a large part of the habit-developing phase in practice with exercises of this type. If a student must learn a new sound or grammatical pattern or meaning area for a linguistic symbol, if this constitutes a blind spot for him, he will not learn it efficiently, if at all, in any existing language laboratory. He will learn it more economically and effectively in a well-conducted classroom. On the other hand, once he is capable of distinguishing and producing the new contrast, aware of its occurrence and uses, the laboratory, where full-time individual practice is the norm, is the best place to develop the new learning into a habit of response.

ROLE OF RESEARCH IN LANGUAGE TEACHING

Linguistics has brought into language teaching a high regard for observation and experiment. Testing has become one of the areas of great concern in the application of linguistics to language teaching. There are tests which indicate accurately student advancement over a period of time, tests of proficiency which indicate a student's chances of success in part-time or full-time college work, and now tests of language aptitude. We have reliable structural analyses of some languages. Lado has recently completed a book for teachers on how to compare structural analyses.³ Some linguistic comparisons have been made and used in materials preparation. The results of other structural comparisons are about to be published.

After structures have been isolated and compared, however, we are still faced with the problem of guessing the func-

tional load of these structures. Current need for guessing in this field is an indicator that it requires further research. More structural analyses and comparisons are required in language and related behavioral systems. We should foster research on the role of culture, and even on the role of previous history of language teaching in an area, in determining current desirable practices. There is a vast untouched area in experimental testing: testing for effectiveness of exercise types and sequences, testing the efficiency of laboratories, testing the usefulness of variant kinds of initial presentation with and without a teacher, developing and testing new laboratory machines incorporating the principles of the sound spectrograph which could conceivably serve to teach and correct students.

Actually, work in most of these areas is under way. As old difficulties give way to newer ones we may continue to expect new dimensions to insights—insights into our own culture as well as others. We have a deeper understanding of an event or entity not only as we learn more about its structure but also as we see its total environment. Many feel that with greater insight and understanding come more firmly founded hopes for insight and mutual understanding which will bring peace and progress in an atmosphere of reciprocated good regard. Some of this feeling could be the result of the coming of linguistic science and related views as a major factor in language teaching and culture study. In any event, the immediate goal of language teaching, native or foreign, is to give new freedoms of successful communication to the individual, freedoms which he has a better chance of attaining as science and teaching move ahead.

³ Robert Lado, *Linguistics Across Cultures* (Ann Arbor, University of Michigan Press, 1957).

Education and Leadership

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THE educational process can be analyzed from three points of view. One may start with the men who educate—the teachers—and the society that they represent. For them, education could be defined as a planned effort on behalf of the society to transmit its cultural values and treasures to the coming generation. No society can survive without perpetuation of its civilization. Education, being a transmission of culture from one generation to another, is performing this important task.

From the point of view of those who are being educated—the learners—education is a process that enables them to learn; that is, to modify their behavior in the direction of better adjustment. Learning, whether it is a classic or an operant conditioning, whether it is trial and error or insight, always involves modification in behavior, the term behavior being used here in the broad connotation of totality of overt and covert actions of the individual. [9]

As seen by the social psychologists, education is a process of interaction in which several individuals are involved. These individuals are usually categorized as teachers and students, but beyond these two categories is the totality of social relations in education in which more parties participate, usually administrators, supervisors, and counselors.

Some students of social aspects of the

educational process emphasize the role of communication and some go as far as to characterize the entire educational process as one in interpersonal communication. Unquestionably communication takes place in all fields and phases of education, but education cannot be reduced to communication and studied as a process of communication only. Communication and education are closely related and in some respects they overlap. One may communicate and not educate, but while educating one usually communicates. Communication is the tool which is used in education without reference to the kind of job that is done. By analogy, psychotherapy is conversation, but conversation is one of the technical tools of therapy and does not determine the nature of the psychological process that takes place in psychotherapy.

Undoubtedly the nature of communication must influence to a certain degree the educational relationship and should be studied as one of the aspects of education. The educational process requires another definition, however, one that will convey the meaning of the sociopsychological process that takes place in education.

Education is a process of interaction and interdependence. Interaction can be defined as an action or motion in which two or more individuals participate. This is obviously an insufficient presentation

of the issue, since two individuals in close physical proximity can act simultaneously but no interaction result. Consider, for instance, the talk of two infants that speak in the presence of each other but not with each other, called by Stern *nebeneinander reden*. [17] Interaction must be characterized by actions of two or more individuals who cause change in the behavior of each other. This definition already includes interdependence, which is nothing but a dynamic or causal relationship.

EDUCATION AS A GROUP PROCESS

Social relations can be divided into positive and negative interaction; that is, social and so-called antisocial behavior. The terms social and antisocial are colored by a value judgment of the Judeo-Christian civilization. The term social implies love, charity, friendship, cooperation, sympathy, and peaceful relations, while the term antisocial implies crime, hate, violence.

Unfortunately the antisocial phenomena belong to the category of interpersonal relations just as much as the social ones. From a purely empirical point of view, both types of behavior represent "social" relations. However, it is morally sound and empirically useful to distinguish between these two categories.

A group is a social unit or a unit of social interaction. This interaction, irrespective of the goals of the group, must be positive and cooperative or the members will leave the group. This applies, obviously, to groups in which membership is voluntary. In such a group the positive and cooperative type of interaction is a prerequisite of the survival of the group, for the prevalence of negative and disruptive interaction will end in dismemberment of the group.

Education is always a group process, that is, a process in which several individuals are involved in positive social interaction. It would be useless to talk about education if students and teachers fought each other or if hate and violence prevailed in school buildings. Education is a group process in which one party, the educators, aim at serving the needs of the other party, the pupils.

The classroom group represents an unusual type of positive group interaction. Interaction in a group may develop in several directions. Theoretically, it should go in all possible directions and from all members to all members, as observed by Bales. [2] However, this mutual and multi-directional influence takes place within one category of classroom participants only, the students. The other category, which is usually composed of one individual, the teacher, is not expected to change (to be influenced). The social role of the teacher does not indicate the necessity of being educated by the students.

DUAL SOCIAL ROLE

The democratic teacher faces a conflict situation. He would like not only to preach but to practice democracy, equality, and freedom. Many progressive educators in Europe and in the United States endeavored to create an educational system that would give the child the rights that adults have. An enthusiastic educational reformer, Ellen Key, proclaimed the twentieth century as the "Century of the Child." Following in the footsteps of Rousseau, she maintained that the secret of successful education is to refrain from educating and let the child act spontaneously. [10] Montessori opposed the idea of any interference with the child's spontaneous activities. [12] Tolstoy insisted on an educational system that is satisfac-

tory to the children. [18] The entire movement of progressive education in this country agrees with Dewey's demand for gratification of the child's needs as a primary concern of education. [5]

Modern, liberal education faces a dilemma which does not exist in the authoritarian system. In the latter system the children may be forced to do what the teachers deem right. All methods inclusive of corporal punishment are used, and this is the sad part of the history of education. Often all that has been done with the good intention of eradicating the evil inclinations of human nature has resulted in enslaving children. [16, ch. 13]

Liberal-minded educators oppose coercion on ethical, sociological, and psychological grounds. Human dignity of the child was respected by such great educators as Locke, Rousseau, Comenius, Pestalozzi, Tolstoy, and Dewey. It is not a mere coincidence that great educators were great social philosophers who fought for justice both for mankind and for the human child.

And yet most of the great educational reformers faced certain difficulties related to the problem of democracy in education. Apparently the source of these difficulties lies in the assumption that whoever educates for democracy must practice democracy, not only toward the students themselves but also toward teachers. The demand for equality between teachers and students led to a series of interesting experiments in education, such as school-community and children's governments, not all of them successful. For students are not equal to teachers in knowledge, skill, competence, mastery of the subject matter, and life experience. If teachers and students were given equal rights and responsibilities, as some educators have suggested, how could teachers possibly fulfill their objectives and modify the

behavior of students in such matters as spelling, multiplication, and education for lawful and moral behavior?

Education in a democratic society must lead to democracy and help the students to develop the attitudes and manners necessary for the democratic way of life. But the educative process that takes place in the classroom is *non-democratic if educative*, or *non-educative if democratic*. The basic inequality in competence, in experience, and in privileges and obligations is the very foundation of the teacher-student relationship. [20]

This difficulty can be explained by an analysis of the social roles of the school child. The term social role is used here to mean behavior pattern expected as stated by Newcomb [13] in accordance with the ideas of George Mead. The child has to perform at least two social roles. One is that of being presently a child. Starting with Rousseau, progressive education the world over protected the rights of the child to live as a child, to be cared for, and to find full expression of his drives, needs, and interest accordingly. [15] But this child-centered philosophy of education seems to have underestimated the other social role of childhood, which is to grow and develop into adulthood. The greatest disservice one can do a child is to perpetuate his childhood. The adult who retains childish ways is unable to live an adult life and attain satisfactory adjustment and personal happiness. Mental disorder is generally conceived as a regression to or fixation in an early developmental stage. Freud [6], Abraham [1], and several other students of mental disorders accumulated conclusive evidence that these are a result of regression, fixation, and malformation in the developmental process caused usually by unfavorable environmental influences.

Democratic educators must take into

consideration both social roles of childhood. Obviously the humanitarian principles of democracy call for respect for the child as a child, and exclude coercion. The only way to avoid the conflicting social roles of childhood is to foster the child's growth and enable him to participate in the adult world. Development, as proved by Gesell, is both maturation and learning. [7] The child cannot become a well-adjusted adult unless he is being guided, protected, and taught; full freedom of action for the child may seriously impair his development into adulthood. He must be helped as a child, so that he will become an adult.

The contemporary educational theorists are fully aware of the risk of unguided learning activities. Learning without guidance may lead nowhere, become utterly inefficient, and result in the establishment of faulty techniques. [4] Teaching is "the encouragement and guidance of the learning activities of pupils," says Burton, and he emphasizes the need for knowledge, subtle insights, complicated skills, and a dynamic personality of the teacher. [3]

LEADERSHIP

The need for guidance in education is undeniable. The question is, what makes the pupils accept willingly the guidance offered to them?

Leadership is the sociopsychological equivalent of the educational term guidance. It is a social relationship within the framework of a group, and the group is made up of leaders and followers. In this relationship the activities of the followers are initiated, stimulated, and sometimes controlled and determined by the leader. No one can be a leader unless someone follows him; that is, accepts the leadership, guidance, and control of his activities.

Quite possibly we will obey someone at gun-point; we may be forced or enslaved, but no one could call this leadership. Hartley suggested the term "headship" for that kind of relationship. [8] Within the framework of a group defined as cooperative, leadership depends upon the willingness of the followers to accept the guidance or control of the leader.

In daily life all of us accept the guidance of others and follow their instructions and prohibitions. We obey our physicians and dentists and accept the unpleasantness or even pain caused by them. We take medicines, submit to injections, and stay indoors when ordered by them. The same to a lesser or greater extent applies to our reaction to other experts. We consult a lawyer on legal matters and usually follow his advice, and we ask interior decorators to tell us how to furnish our homes.

The reason for this obedience is obvious: we are aware of certain needs, and of our inability to take care of them. We accept guidance from individuals whom we perceive as *strong*; that is, capable of satisfying our needs, and *friendly*; that is, willing to do so. And this is what makes us followers. [23]

Our weakness, inability to satisfy needs, and awareness of this lack make us followers. Adults are usually capable of satisfying most of their needs. As a result of what Durkheim described as "division of labor" we are exchanging goods and services with other individuals. None of us is his own baker, shoemaker, butcher, and barber. The division of labor is based on a give-and-take relationship.

But satisfaction of needs and leadership are not identical. We might define power as the ability to satisfy needs, and acceptance as the willingness to do so. [23] Obviously in our social relations

we tend to associate with individuals perceived by us as strong (able to satisfy our needs) and friendly (willing to do so). But we need leaders to initiate, stimulate, guide, or control our activities and we are afraid that without leadership we may not be able to satisfy our needs.

As long as we are aware of this weakness we are willing to accept leadership. A man who is unaware of having cancer or one who believes that he can "doctor" himself will not consult a doctor. A maniac at the height of his megalomaniac self-admiration rebels against any authority and rejects any guidance.

Infants, as Freud and Ferenczi have observed, indulge in hallucinatory omnipotence dreams. [6] They may not wish to be guided. It requires some life experience to make one a good follower. "The burnt child dreads the fire" and seeks his mother's protection and guidance. As soon as the child becomes capable of perceiving the outer world as a possible menace to him and realizes his own weakness, he turns to parents for help and guidance. Awareness of one's own weakness is a great step toward maturity.

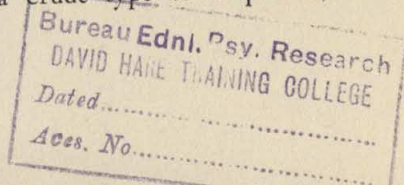
EDUCATION AND DEMOCRACY

This leadership is non-democratic, however, even in an education for democracy. In democratic societies the leaders are elected. This system is usually practiced in schools in relationships between the students themselves; for example, in the manner they elect the leaders of the student body, but in no school in the world do the students elect their teachers. Teachers are appointed by school authorities, who are not elected by children. The adult society elects its leaders in a democratic way, but nothing of that kind takes place in teacher-student relationship.

In large schools and colleges students

may have a choice between one teacher and another, but all teachers are appointed and none of them is elected by a student body in a truly democratic manner. Democracy does not prevail in classrooms. The teacher, backed by the authority of our civilization, teaches his pupils how to spell, add, and reason; spelling and arithmetic are not decided by majority rule. The teacher has the final say in such matters as the textbook to be used, supplementary books to be read, essays to be written, reports to be prepared; and "opposition to the government" as practiced in democratic countries is not tolerated in the classroom.

It would be rather difficult to consider the Lewin, Lippitt, and White experiments as representative of the democratic, autocratic, and laissez-faire types of leadership as distinguished by Kurt Lewin. [11] In these experiments with groups of boys, all leaders were appointed by the experimenter and none was chosen by the members of the groups. The change of leaders took place not when the group members wished it but when Lewin decided it should. The members of the group had no influence whatsoever upon the choice of the leader or continuation or discontinuation of the type of leadership. It seems logical to conclude that all three "social climates" named by Lewin—democratic, autocratic, and laissez-faire—were actually autocratic. In the so-called democratic leadership the leader was actually an autocrat but benevolent and liberal ruler, a sort of enlightened autocrat who had the power to give the orders but preferred to consult his subjects and was friendly toward them. History knows several instances of autocrats who ruled in a liberal manner. The autocratic "social climate" in Lewin's experiments represents a crude type of despotism, un-



friendly and inefficient. The laissez-faire leader in Lewin's experiments was no less autocratic, but disclosed little initiative and little common sense in conducting the activities of his group. The boys in his group knew very well that the laissez-faire leader had all the authority to issue orders but for some reason he took no initiative. In their eyes, the laissez-faire leader was probably one who for some reason did not practice leadership, or not a leader at all since he did not initiate, stimulate, or control the activities of the members of the group.

Several types of leadership can be discussed in regard to the method of assuming leadership, as by free elections, a clique, or a *tour de force*, or by appointment, as in any authoritarian system such as the army. There are differences in methods of leading—absolutistic, liberal, and so on. There are differences in regard to the objectives of the leaders, who can be selfish or idealistic. In a classroom situation the teacher is appointed and autocratic, but liberal in method of ruling and working for the well-being of his followers, the students.

QUALITIES OF SUCCESSFUL LEADERS

In all categories and methods of leadership a successful leader is perceived by his followers as a person capable of satisfying their needs (strong) and willing to satisfy their needs (friendly). The "strong" and "friendly" individual receives obedience from the other group members, who wish to be guided in their activities by someone whom they perceive as strong and friendly. This probably applies to classroom situations too, and if today there are too many difficulties in classroom discipline in this country, one of the contributing factors must be related to some deficiency in the

teacher-student or leader-follower relationship.

In a study of classroom discipline, attention was given to the ratings of teachers by students in the above-mentioned dimensions of power (strong versus weak) and acceptance (friendly versus hostile). [20] A teacher who was rated weak and hostile could not control his class; the students overtly defied the instructions of the weak and hostile teachers. These teachers constantly reported discipline problems and most of them desperately and unsuccessfully struggled with unruly classes.

Teachers rated weak and friendly had poor discipline. In most cases they tried to please their students. Whenever their instructions met with the approval of the student body, they were fulfilled, but whenever the students raised objections against too many or too difficult assignments the teachers' instructions were disobeyed.

Teachers rated as strong and hostile had good discipline and their instructions were carefully carried out by their students. They had clashes with their students, however, and occasionally rebellions flared up.

Practically no disciplinary problems were noticed in classes taught by strong and friendly teachers. Their instructions were implemented thoroughly with almost no objections. Students did not dare or wish to alienate their "powerful friends." In interviews, questionnaires, and essays the students emphasized the wish to please the strong teacher and make him stronger by their support, and thereby assure more friendship. Thus, ratings of both power and acceptance seem to have been interrelated in their scoring system.

A method of rating the dimensions of power and acceptance has been developed

by this writer into a special technique called a statogram. [23, 24]

THREE TYPES OF LEADERSHIP

Three types of social relations can be distinguished in regard to the objectives of the participants. If an individual enters social relations or joins a group, having in mind the satisfaction of his own needs, this is an *instrumental* relationship. This individual perceives his partners as instrumental in gratification of his needs; his objective is to take and not to give. The prototype of instrumental relationship is the infant's attitude toward his mother. [24, 25] In adult life all of us enter instrumental relationships. A patient seeking help from a physician has an instrumental attitude. Of course the patient pays for the doctor's advice, but no patient goes to a doctor with the objective of paying; the only objective is to get help. The social system requires us to pay for medical services of private doctors, but no payment for each visit is involved in health insurance plans or in the British Beveridge plan. The student who registers in a college has the same instrumental attitude. Whether or not he pays tuition does not affect his objectives, which are to "take," and therefore his attitude is instrumental.

Any employer-employee relationship is instrumental for both parties. The employer hires personnel not because he wishes to pay them salaries but because he needs their work. Accordingly, his attitude is instrumental, irrespective of the fact that he has to pay salaries. The same applies to the attitude of the employees. When they look for a job and enter some sort of social agreement with an employer they do it not because they wish to help the employer to increase his income or to develop new industries. The employees accept jobs with the ob-

jective of earning a living, and consider their employer as instrumental in the attainment of their objective.

Often we enter a different type of relationship based on a give-and-take objective. It should be emphasized again and again that the distinction relates not to what people do, but to why they do it and for whom. The proposed division of social relations is based on the assumption that *motivations* and *perception* are the decisive factors in social relations. [23, 24, 25]

In some social relations individuals wish to give and take. The prototype of that relationship is marriage. When two individuals enter the marriage relationship their objective is to attain maximum happiness and to offer maximum happiness to their spouse. This type of relationship applies not only to husbands and wives, but to friends who are ready to help each other and hope to be helped when necessary [19]. This *mutual acceptance* may apply to business partnerships if the partners are concerned not only with their own profit but with the profits of their partners as well.

The third type of relationship, the *vectorial*, applies to an individual entering social relations with the objective to *give or to satisfy the needs of others*. The prototype of this attitude is that of a mother toward an infant. The mother wishes to make the child happy, and her happiness is derived from the child's well-being. A vectorial attitude represents the willingness for self-sacrifice, and can be found in idealistic, religious, and charitable groups. [22, 24, 25]

There are two goals of education. The *immanent* goal is embedded in the educational process and is common to all cultures. It aims at adulthood. The term adulthood is interpreted differently by different cultures, thus each society es-

establishes its own *transcendent* goal. The immanent goal of education is to help the child to grow and mature; the transcendent goal of education is to help the child to grow and mature in a manner proper for a given society and culture. [21] In both cases the well-being, success, and happiness of the child as a future adult are the main objectives in a child-centered educational system. In a socio-centered educational system the emphasis in the transcendent goal shifts from the needs of the child to the needs of the society. In any case and in any philosophy of education the goal of the teacher in the classroom situation is not to satisfy his own needs but to serve the needs of the students. And this is exactly a vectorial relationship in which the vector-minded individual directs his efforts to serve the needs of other individuals or the society at large.

There are several types of leaders. An instrumental leader uses the resources of his followers for his own benefit. A mutual acceptance leader is willing to serve his followers but hopes to be served by them too. A vectorial leader (and all great spiritual leaders of mankind have been and are vectorial leaders) does not present a bill for his services. His only endeavor is to make other people happy. [22]

VECTORIAL EDUCATION

A group is what it is to its members. How it is perceived by the members and what their motivations about the group are determine its nature. Even a charitable organization may serve as an instrumental group for its ambitious director if the reason for his work for charity is a high salary or other advantages. The same organization may become a mutual acceptance group for board members who are genuinely willing to give their time

and money but hope to get some rewards, awards, and honors for their work. The same group may be vectorial for those members who do not care for any publicity or awards but wish to help needy people even at a price of self-deprivation.

For the average child the class is an instrumental group, at least at the start. He comes there to get something. He may learn in the course of years that there is not much chance to get unless one gives. The growing youngster may accept the give-and-take idea as a necessary evil and give only when it pays to give. His social development has stopped at the instrumental level and his only true concern is for his own person.

Education is the encouragement of growth from infancy to adulthood. Infants are narcissistic and autistic [1, 14]; they are unable to help anyone or to take care of someone. Adults feel the need for taking care of their children. One of the most important signs of adulthood is the willingness to give love and protection to children, to help them grow and attain maturity. *Parenthood is the symbol of adulthood*. The willingness to be of service to others is one of the most important signs of maturity.

A vectorial leader, which a teacher is expected to be, must help the children to become adults capable of vectorial attitudes. Perpetuation of instrumental attitudes is equal to perpetuation of social and emotional immaturity, and mental disorder is too often a result of regression to early childhood. [1, 6]

There is a natural tendency to grow and mature throughout the developmental stages. No development phase disappears completely, and even adults retain certain elements of childhood. The well-adjusted adult is capable of interacting socially on all three levels, and may enter instrumental, mutual acceptance, and vectorial re-

lationships. The task of the schools is to help the children grow (immanent task) and to adjust to the adult society (transcendent task). [21] The natural tendency of growth has to be supported by educational influences. Gesell has proved that development is a result of both maturation and learning. [7] As Freud has emphasized, how safely the child will pass through the developmental stages depends upon environmental influences.

Here comes the teacher as a leader. Being a vectorial leader, he encourages higher levels of interaction and guides the students from instrumental to mutual acceptance and vectorial behavior. In other words, he helps the children to grow from selfishness to maturity and to readiness for self-sacrifice whenever needed.

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Recent American Interest in Soviet Education*

With Some Allusions to History and Astronomy

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Glisten, glisten, little moon;
How did you arise so soon?
Especially from a peasant nation
Which gives its folks no education?

I

TEN years ago a prominent American educator warned a meeting of school administrators at Atlantic City that Soviet advances in education were threatening the scientific and cultural pre-eminence of the United States. The audience was large, attentive and respectful—but obviously unimpressed by the speaker's prophecies. This writer had an opportunity to talk later with the speaker and to put the question, What will ever awake Americans to the challenge presented by the training being provided millions of students in the USSR? His answer proved to be as accurate as the content of his address. "I don't know," he said, "but it will probably be something out of this world."

The educator, of course, was George S. Counts, and the reason for his pessimism was obvious.

For twenty years preceding this conversation he had been trying to convince the American public, and especially the teachers, that we could not rest upon our laudable laurels of the past, but must move toward new goals, new content, and new procedures in our school systems. He had taken the Soviet Union as the prime example of a nation which *was* progressing toward these changes, and as the nation most likely to undermine the then-acknowledged, and actual, supremacy of the United States in world affairs. Even the titles of Dr. Counts's studies of Russia during the past quarter-century reveal the anxiety he felt for the capacity of our educational system to withstand the challenge of Soviet gains.¹

Had George Counts been the only

¹ See his translations (with Nucia P. Lodge) of Albert P. Pinkevitch, *The New Education in the Soviet Republic* (New York, John Day, 1929); of Ilin's *New Russia's Primer* (Boston, Houghton Mifflin, 1931); and of "I Want to Be Like Stalin" (New York, John Day, 1947). Also his *The Soviet Challenge to America* (New York, John Day, 1931); *America, Russia, and the Communist Party* (with John L. Childs) (New York, John Day, 1943); *The Country of the Blind—The Soviet System of Mind Control* (with Nucia P. Lodge), (Boston, Houghton Mifflin, 1949); and *The Challenge of Soviet Education* (New York, McGraw-Hill, 1957).

* Professor Johnson spent the years 1934-37 teaching English in the Soviet Union on a travel fellowship from the University of North Carolina. During World War II he was engaged in research on Russia for the United States Government.

voice crying in the wilderness these past forty years one might regard him simply as a victim of overshadowing opinions and events. But such is not the case. A new Gray's Elegy could be written with the names of those, well-known and respected in many fields of activity, who sought in vain to warn the American people of the dangers of complacency in the presence of Soviet educational progress. During the first year of the first Five-Year Plan, Mrs. Lucy Langdon Wilson of the Philadelphia public school system returned from a visit to the Soviet Union and urged that we give more attention to its advances in education.² A year later, Samuel N. Harper, son of the first president of the University of Chicago, and himself a member of the faculty of that institution, pointed out that the Soviet system of education was inculcating in its students of all ages a firm resolve to form a new and powerful social system.³ This same process was reported from the viewpoint of a noted educational psychologist, William Clark Trow of the University of Michigan, who revealed the kind of person the new society hoped to produce in huge numbers.⁴ The conclusions of both these scholars were supported by Thomas Woody of the University of Pennsylvania, whose analyses of the fundamentals of Soviet education twenty-five years ago remain valid to this day.⁵ Harry F. Ward of Union Theological Seminary offered early massive evidence that new social incentives were being created in the Soviet Union, and that Soviet youth was re-

sponding enthusiastically to the new conditions.⁶

Of course the views of these persons could be, and were, dismissed as the visionary ideas of mere college professors. But the same conclusions were being expressed at the same time by people in the fields of art, journalism, and science. Joseph Freeman, Joshua Kunitz, and Louis Lozowick established that Soviet efforts in literature, drama, cinema, painting, and music were worthy of our attention, not so much because of their achievements, as because of the new spirit which inspired and motivated young students in these fields.⁷ The hard-boiled novelist Theodore Dreiser was also impressed by the spirit and optimism of Soviet youth, and seemed to sense that some day young people would be in a better position to assert authority within a system which he recognized then as stifling to some forms of expression.⁸ Another American writer, Ella Winter, provided new insights into the popularly misunderstood standards of morals and ethics in Soviet society, showing that the youth of the new regime were more interested in social progress than in self-satisfaction.⁹

If the writings of these reporters of the humanistic-social-aesthetic aspects of Soviet society attracted little attention, it is safe to say that our observations of the scientific scene created even less interest. The many articles of Dr. Frankwood Williams testified to the new climate of mental health enjoyed by Soviet youth, but most Americans continued to think of the Russians as motivated only by the

² *The New Schools of New Russia* (New York, Vanguard Press, 1928).

³ *Civic Training in Soviet Russia* (Chicago, University of Chicago Press, 1929); *Making Bolsheviks* (Chicago, University of Chicago Press, 1931).

⁴ *Character Education in the Soviet Union* (Ann Arbor, Mich., 1934).

⁵ *New Minds, New Men?* (New York, Macmillan, 1932).

⁶ *In Place of Profit* (New York, Charles Scribner's Sons, 1933).

⁷ *Voices of October—Art and Literature in Soviet Russia* (New York, Vanguard Press, 1930).

⁸ *Dreiser Looks at Russia* (New York, H. Liveright, 1928).

⁹ *Red Virtue* (New York, Harcourt, Brace, 1933).

lash and the gun. Dr. W. Horsley Gantt¹⁰ of Johns Hopkins University Medical School spoke glowingly of the esteem in which Ivan Pavlov was held, signaling three decades ago the deep interest of the Soviet peoples in scientific research and achievement which we as a nation have just begun to realize within the past year. Dr. Henry Sigerist, head of the Department of the History of Medicine at the same institution, strove for several years to bring Soviet advances in medical science to the attention of Americans, but *The American Review of Soviet Medicine* which he edited expired for lack of subscribers.

Meanwhile, several writers in England and on the European continent were making much the same analyses and predictions regarding Soviet progress in several fields, and their books were certainly available to American readers. The classic work, of course, is that by Sidney and Beatrice Webb, which despite its limitations was a major effort to bring to the English-speaking peoples some cognizance of the potential forces within Soviet society.¹¹ However, since the Webbs were well-known Fabian socialists, many American readers discounted their conclusions and evaluations. But even before the Webb study, another English scholar had attempted to analyze Soviet conditions. Louis Segal, an economist, had called attention to the quality of Soviet education, *particularly* in the fields of science and technology.¹² And Klaus Mehnert's comprehensive study of the young people of the USSR, including

many incisive comments on the content and quality of their education, was published in English within a year after the German edition had appeared.¹³

In addition to the fifteen major studies cited above revealing the challenge of Soviet education and published in *English* before the outbreak of World War II, there were many others which, for various reasons, cannot be mentioned here. Also, several competent analysts have given us the benefit of their researches since 1939. Notable among these are the more recent works of George S. Counts and Nucia Lodge¹⁴ and the remarkably informative volume by Nicholas De Witt of the Russian Research Center at Harvard University.¹⁵

Also worthy of mention are the symposiums edited by George B. De Huszar of the University of Chicago,¹⁶ and by Ruth C. Christman for the American Association for the Advancement of Science.¹⁷ Despite wide variation in philosophical evaluations of Soviet efforts in education and science, a consensus of all writers heretofore mentioned would undoubtedly bear out the over-emotional but prophetic reaction of Lincoln Stefens upon his return from a brief visit to Russia more than a quarter-century ago: "I have seen the future, and it works."

II

Any assumption that the Soviet system of politics, economy, or education forecasts the shape of the future would be

¹³ *Youth in Soviet Russia* (New York, Harcourt, Brace, 1933).

¹⁴ See footnote 1, page 474.

¹⁵ *Soviet Professional Manpower—Its Education, Training and Supply* (Washington, National Science Foundation, 1955).

¹⁶ *Soviet Power and Policy* (New York, Thos. Y. Crowell, 1955).

¹⁷ *Soviet Science* (Washington, American Association for the Advancement of Science, 1952).

¹⁰ Biographical Introduction to Gantt's translation of Pavlov's *Lectures on Conditioned Reflexes* (New York, International Publishers, 1928).

¹¹ *Soviet Communism: A New Civilization* (London, Longmans, Green, 1935).

¹² *Modern Russia—The Land of Planning* (London, Industrial Credits and Services, Ltd., 1933).

unacceptable to all peoples devoted to the democratic way of life. Nor is there reason to suspect that such a calamity must necessarily befall us. American social institutions, including the schools, have withstood many serious challenges in their brief but illustrious history. A much more rational view of Soviet influence and power is presented by Edward H. Carr in terms of impact rather than of demolition.¹⁸ Moreover, a recent publication of the Educational Policies Commission of the NEA has shown us that once the American people as a whole become aroused about educational problems, they have generally been able to effect a solution which furthers, rather than sacrifices, the democratic process.¹⁹ Therefore, all Americans should welcome both the challenges provided by Soviet scientific and educational achievements, and the wholesome interest which these achievements have at last inspired in our people.

Now, as in the decade 1930-1940, there is a spurt of interest in Soviet education. Three important volumes devoted entirely to this subject have recently made their appearance. Lest the reading public suspect that this new interest is due to Sputnik, it should be pointed out that these books were obviously in press several months before the events of last October. Thus they have at least one point in common: their publications—all within the brief period October 24 to November 22—certainly came at a most opportune time. Another factor which these books have in common is that all three are the products of group, rather than in-

dividual, research and analysis. Here, as will be demonstrated later, nearly all resemblance ends. Let us start, then, with the one which first came off the press: *Soviet Education*, edited by George L. Kline, a member of the Department of Philosophy at Columbia University.²⁰

This volume is a compilation of nine essays by former Soviet citizens who have had firsthand contact with various aspects of the Soviet educational system. The subject range is wide, covering preschool education, elementary and secondary institutions, teachers colleges, universities, "faculties of special purpose," engineering institutes, and campaigns against illiteracy. Geographic scope is an important factor in studies of a nation as large as the USSR, and the book focuses attention not only upon the European area but also upon the Northern Caucasus and Soviet Central Asia. On the other hand, it is admittedly limited in time: all the commentaries are confined to the period during which Joseph Stalin exercised power. However, since this period encompasses thirty of the forty years of the regime, no one can say that the analyses herein present data which are either ephemeral or minute. Many of the problems faced by the Soviets during the period considered still plague the government today, and many of the policies evolved between 1927 and 1947 are still current.

Take, for example, the first essay in the book, which is concerned with preschool education. Here the author traces the evolution of present-day practices from the strictly political indoctrination of the early years, through the "polytechnical" period of the late 1920's and the subsequent brief trial of the "project method," to the revolt against "pedology"

¹⁸ *The Soviet Impact on the Western World* (New York, Macmillan, 1947), especially Chapter V.

¹⁹ *Public Education and the Future of America* (Washington, National Education Association and the American Association of School Administrators, 1955).

²⁰ Columbia University Press (New York, 1957).

and the establishment in 1936 of procedures closely resembling those of kindergartens in the United States. This chapter in itself is a microcosm of the total school system, for each level, including the institutes and universities, experienced much the same changes at the same times. Such revelations are further proof of how well integrated are the various parts of the Soviet educational system, and of how closely they are tied to the society as a whole.

The second essay is largely a biographical account of the training and professional experience of a Soviet secondary-school teacher in the years preceding World War II. At many points it is reminiscent of the lives of Russian school teachers during the last two decades of the Empire.²¹ Political domination of method and content, inadequate preparation of many teachers, inattention of students, long hours and low pay—little seemed to have been changed by the Revolution except, of course, the *nature* of the political control. In the middle 1930's, however, new strength entered the school system. Admission standards became more stringent at the secondary and higher levels, and political status ceased to be a major factor in the selection of students. Teachers were given more authority in the classroom, and student discipline improved rapidly. Examinations and grading systems were introduced, along with wider use of printed textbooks. Most important of all, perhaps, was the determined effort of the government to improve the training, performance, and status of the school teachers.

The last chapter in the Kline volume will probably attract more attention than the others, simply because it is devoted to

the training of engineers. There is no harm in that, however, for this essay is at least equal in quality to those described above. Actually, its scope is larger than its title indicates. There is a brief resumé of higher education before 1917, and an account is given of its development through the same periods considered in the essay on preschool education. It is clear from this analysis that engineering education occupied a high priority in the USSR from 1929 onward, a fact which reflects little credit on those American observers who only recently realized the quality of Soviet scientific training.

The author of this review must admit to a personal, as well as an academic, interest in this volume, for he himself was a teacher of English in several Soviet secondary and higher schools during the period 1934-1937. The essays evoked many memories of those years and also stimulated much examination of notes and other data for the purpose of comparison. Perhaps it will suffice to say that not a single important disparity was noted between the accounts of these eight former Soviet students and teachers and the recollections and records of this reviewer. If any readers today wish to understand the background from which current Soviet educational achievements have emerged, let them read carefully these analyses of a process which began a generation ago, and which for a generation we have ignored.

The second volume to be considered also purports to be somewhat less than it actually is. Entitled *Soviet Education for Science and Technology*, it was prepared by a group of researchers at the MIT Center for International Studies under the editorship of Alexander G. Korol.²²

²¹ See William H. E. Johnson, *Russia's Educational Heritage* (Pittsburgh, Carnegie Press, 1950), Chapter 10.

²² Technology Press of Massachusetts Institute of Technology and John Wiley and Sons, Inc., New York, 1957.

Supplied with 40 pages of appendices, 11 pages of carefully selected bibliographical items, 25 double-column pages of index, and more than 100 tables and charts, the book is almost overwhelming in sheer amount of data. While its major focus is upon the training of engineers and scientists, it provides us with more information on the organization of the Soviet educational system *as a whole* than any other work which this reviewer has encountered in the past several years, with the exception of the latest (1957) book of George S. Counts.²³

Opening with a brief but enlightening description of the system of mass education, the volume then proceeds to a careful and complete analysis of the ten-year school: its organization, curriculum, instructional policies, textbooks and examinations. Much more than mere description is provided in this section: excerpts from actual syllabi, textbooks, official decrees, and final examinations (in algebra and physics) are presented to document the commentaries of the writers. Since higher education is obviously required of all engineers and scientists, three-fourths of the book is devoted to this level, but a brief account of secondary technical schools introduces the major theme.

One of the most interesting discussions in this study reveals that approximately half of the quarter-million graduates of Soviet higher educational institutions in 1955 were trained as *teachers* and only about 27 per cent as engineers (p. 202). We must recognize, of course, that among these pedagogical graduates were many teachers of mathematics and science, and also that since 1955 *all* university graduates have been certified as teachers regardless of what profession they plan to practice (p. 135). We learn that the annual number of class hours scheduled in

Soviet institutes and universities is far in excess of that in corresponding institutions in the United States (p. 223), and that all programs tend to be much more specialized than our own (p. 135). Throughout the volume, comparisons with the United States are drawn, usually in a footnote so as not to impede the continuity. Very wisely, the writers have refrained from attempting to establish salary equivalents between the two nations, and instead have compared Soviet teacher salaries with other occupations in the USSR (pp. 303-309).

The temptation to summarize the conclusions and evaluations presented in the last chapter of this book is very great indeed, but good judgment prevails against it. Perhaps some philanthropic foundation or person could have this chapter reprinted and put into the hands of millions of Americans, especially those who are teachers. Such a move might assist the authors to proclaim more widely one of their final pleas: that we not permit "American education to lag behind its expanding goals and responsibilities."

The last of the three volumes under review has already attracted considerable attention and is likely to continue to do so for some time. There are several reasons for this. First of all, *Education in the USSR* is a publication of the U.S. Office of Education and marks one of this agency's most ambitious attempts to describe the system of education in another nation.²⁴ Secondly, a large staff of researchers, writers, and editors labored for the better part of two years to produce the study. And finally, hardly had the book been made available to the public when a spirited controversy broke out over its content, scope, authorship, ob-

²⁴ Bulletin 1957, No. 14, U. S. Department of Health, Education, and Welfare, Washington, 1957.

²³ See footnote 1, page 474.

jectivity, and accuracy. This review, however, is not the place to consider at length either the public reactions or the official replies—both these aspects have been given ample space in recent newspapers.²⁵ In any case, it is the *published* version of the book which must be judged, rather than arguments over the original form of the manuscript.

Unfortunately, the published version leaves much to be desired. Whereas the Korol volume just described fairly bristles with documentation, footnotes occur only infrequently in this work. The lack of documentation not only tends to reduce the authority of such a study, but also means that it fails to provide students of the subject with guides to further research. The latter fault is aggravated by the woefully inadequate bibliography, especially that in English, which lists only nineteen items. There is no index.

Were these physical deficiencies all that mar the volume, they could be overlooked. But such is not the case. There has been considerable carelessness either in research, or editing, or both. The statement is made (p. 11) that "the Union-Republic Ministry of Higher Education alone controls higher education for the Nation," whereas its authority extends only to universities, pedagogical institutes, and a few other establishments; nearly all technical and engineering institutes are under the control of the appropriate technical ministries. The discussion of five-year plans (p. 17) makes no mention of the fact that they are no more: the government has for sometime now been embarked on the first of a series of seven-year plans. We are told (p. 67) that "there is no choice of sub-

jects in Soviet schools," yet a few pages further on (p. 74) we discover (correctly, this time) that there is a choice of foreign language beginning with the fifth grade. A different kind of research or editorial fault is illustrated by the introduction to the chapter on preschool education (p. 39). The first two paragraphs of this passage bear an astonishing resemblance to the corresponding discussion in a well-known textbook,²⁶ yet there are no quotation marks, no footnote reference, and the volume in question is not even listed in the bibliography!

Despite the faults mentioned above, the book should prove very useful to the casual or beginning student of Soviet education. Its low cost will assist its wide sale: already 14,000 copies are in circulation and another printing will soon bring out 13,500 more.²⁷ The volume is comprehensive in that it covers the system from the preschool through the college level, but it provides almost nothing on the graduate level. The language used is simple and non-technical, and the tables, charts and illustrations furnish much graphic detail. There is no question that by the publication of this study the U. S. Office of Education has increased its stature in the eyes of the American public. Let us hope that this agency will be encouraged to extend its efforts toward similar large-scale studies of the educational systems of other major nations. Communist China would certainly offer an interesting and valuable comparison with the present work. Furthermore, the publication of such a volume would serve notice that Americans do not intend to be taken again by surprise at the educational potential of Communist nations.

²⁵ See *New York Times*, November 20, 21, 23, and December 4, 1957; *New York Post*, November 11, 1957; Press release of U. S. Department of Health, Education, and Welfare dated December 11, 1957.

²⁶ A. H. Mochlman and Joseph S. Roucek, *Comparative Education* (New York, Dryden Press, 1952), p. 389.

²⁷ Figures furnished by the U. S. Office of Education, February 1958.



REVIEWS

Desegregation and the Law, by Albert P. Blaustein and Clarence Clyde Ferguson, Jr., New Brunswick, New Jersey, Rutgers University Press, 1957. xiv + 333 pp. \$5.00.

Racial Discrimination and Private Education, by Arthur S. Miller. Chapel Hill, University of North Carolina Press, 1957. ix + 136 pp. \$3.50.

With All Deliberate Speed, edited by Don Shoemaker. New York, Harper and Brothers, 1957. 239 pp. \$3.50.

By any calculation May 17, 1954, when segregation in the public schools was declared unconstitutional by the Supreme Court, was a fateful day in the history of the United States. It was surpassingly important in many ways—for the Court, for education, for the course of American government and politics, for racial relations, and indeed for our international relations as well. It cannot be gainsaid that the decision in *Brown v. Board of Education* grew out of America's most serious social problem, the problem of extending to the Negro population—and one American in ten is a Negro—full democratic citizenship.

The storm kicked up by this decision has rarely been equaled in our history. Perhaps roughly comparable was the furore created by Chief Justice Taney's opinion in the *Dred Scott* case, which also dealt with the status of the American Negro. The Court's ruling against the constitutionality of the federal income tax in 1895 was the subject of prolonged and bitter debate, as were the decisions against the leading New Deal statutes of the first administration of President Roosevelt. But the race question cuts a wider and deeper swath across the whole face of American life and impinges upon

almost every aspect of the nation's existence: political, social, economic, cultural, moral and religious.

Below the Mason-Dixon Line, May 17, 1954 is widely known as "Black Monday." The *Brown* decision has been denounced as bad law, bad morals, bad educational policy, and an inexcusable invasion of states' rights. On the other hand, the decision has been praised as a welcome step forward in the march to a better democracy for all, and as the inevitable climax of a long course of Court decisions leading in the direction of racial integration in public education. Whatever may be the equities in this debate, it is abundantly clear that the rawest nerves of human emotion have been touched.

The measure of the proportions of the uproar which has followed in the wake of the Court's decision is reflected in the tremendous body of literature which has already appeared on the subject. Indeed, it would be a full-time job to attempt to read everything that is coming out, and even specialized scholars must necessarily be selective in what they choose to read. From the point of view of selection alone, the three books under review constitute an admirable, broad-gauged introduction to the whole problem. Blaustein and Ferguson write about the legal aspects of the school segregation cases. Shoemaker's book considers the measures taken in the South to comply with or combat the Court's decision; and Miller analyzes its impact upon private education. Taken together the three books cover the whole waterfront pretty well. All are well written, none is very technical or too long, and they are obviously addressed to the general reader.

Blaustein and Ferguson are both lawyers. The former is presently director of the law library at the Rutgers Law School and has

written extensively on legal subjects. The latter, a *cum laude* graduate of Harvard Law School, teaches law at Rutgers, and has held a number of positions in both the New York and the federal governments. Their book, *Desegregation and the Law*, describes with an absolute minimum of technical jargon how the five segregation cases came up, how they were argued by counsel, and how the Court arrived at its decision. While the Court reversed the "separate but equal" doctrine of the old Plessy case, the authors show that it hardly came as a bolt out of the blue, since the doctrine had undergone steady erosion through a long series of decisions made during the past twenty years or so. These decisions, as well as the rationale of the Chief Justice in the Brown case, and particularly the much-discussed use of sociological and psychological data, are carefully and clearly analyzed. If the book has any theme at all, it is that while the Court made new law in the segregation cases, it did not make it out of whole cloth. And the authors conclude that the Court's decision rests not upon any doctrine of reasonableness, but rather upon the solid proposition that racial segregation by law is *per se* unconstitutional. They also analyze in considerable detail the problem the Court faced in fashioning a decree, and describe briefly the impact of the Brown case as a precedent for later cases dealing with a wide variety of problems in addition to education, such as transportation, housing, parks and recreation facilities. The authors complete their book with a description of patterns of compliance and avoidance in the states most immediately affected by the abandonment of the "separate but equal" doctrine as a measure of the constitutional guaranty of the equal protection of the laws.

Desegregation and the Law is a fine legal study, learned without being heavy, carefully done and adequately documented, telling a very complicated story in understandable terms. Those who are not familiar with American constitutional law will find this a very informative and readable exposition of the segregation cases.

Professor Arthur S. Miller, who teaches law in the Lamar School of Law at Emory University, undertakes a much more modest analysis in his book, *Racial Discrimination and Private Education*. It is a study of the legal problems involved in the racial desegregation of denominational and other private schools. While the opening chapter briefly discusses the place of the private school system in America, the author is mainly concerned with the possible impact of the Brown decision upon the private schools. He argues that governmental sanctions against integration in the private schools, whatever form such sanctions make take—such as withdrawal of aids, criminal prosecutions, denial of tax exemption, and the like—would be unconstitutional on equal protection grounds. But there are powerful private, nongovernmental sanctions against integration—physical violence, economic pressures, and such psychological weapons as social ostracism—and with these the law is not very effective. While he is aware of the public nature of private education, I think Professor Miller is quite right in concluding that under the prevailing interpretation of the Fourteenth Amendment, which applies the restrictions of the Equal Protection Clause only to state action, what a private school does uncoerced by positive state law does not fall within the scope of possible federal correction.

With All Deliberate Speed is a collection of eleven essays written by staff members of the Southern Education Reporting Service, of which Shoemaker is Executive Director, or by newsmen who have worked closely with the Service and its invaluable monthly newspaper, the *Southern School News*. The purpose of the essays is to describe what has happened along the school integration front in seventeen Southern and border states during the first three full years following the Brown decision. The opening essay deals with the legal aspects of desegregation, and there follow discussions of the battle for the control of the schools in the South, the record of violence, desegregation in the border states, in the cities and in

the Deep South, the impact of the issue upon politics and the legislatures in the affected states, the experience in Washington, D. C., the segregation problem in the colleges, and the plight of school administrators in the troubled areas. These essays, which are altogether lively and uncluttered, bring together a large amount of factual data, but also venture to interpret the facts.

For one thing, these essays lay appropriate emphasis upon the critical importance of leadership attitudes. The mob violence in Southern communities, and the persistence of intransigent opposition among large segments of the population are most certainly encouraged by the defiance expressed by such exalted community leaders as members of Congress, governors and state legislators. Just as one of the principal reasons for juvenile delinquency is parental delinquency, so does the lawlessness of public officials trickle down. Thus, a young lawyer in Clinton, a small east Tennessee mill town, is quoted as saying: "What the hell do you expect these people to do when they have got some odd congressmen from the South signing a piece of paper [the Southern Manifesto] that says you're a Southern hero if you defy the Supreme Court?" On the other hand, a stern determination of the community leaders to enforce the law is almost invariably an ingredient of successful integration.

Wallace Westfeldt, of the *Nashville Tennessean*, explores the question whether there is a pattern of resistance to desegregation. He concludes that there is not, but he does venture some generalizations: that the intensity and power of resistance vary directly with the organization of segregationist sentiment in the community; that the number of Negro children involved in any particular place does not matter very much; that advance warning of desegregation may or may not have an effect; that so far at least the position of the clergy has been indecisive; that organized resistance seems to be a delaying tactic rather than a preventive one; that there has been no real bloodshed; and that there have been no crowd demonstrations by Negroes.

Similarly Robert Lasch, of the *St. Louis Post-Dispatch*, in seeking to explain the reasons for the relative ease with which most of the border states have complied with the Court decision, stresses the impact of official attitudes, the factor of extensive community preparation, the difference in community attitudes, the stern readiness of officials to enforce the law against mob violence, and the steady pressure exerted by the courts. It is worth noting that in these areas the opposition to integration has been coming not from the students but from their parents. Similarly, as Edgar L. Jones of the *Baltimore Sun* points out, desegregation has been more easily achieved in the cities than in rural areas, for various reasons: big-city people are not close to policy-making decisions, as rural people are likely to be; metropolitan officials have the full force of law and order on their side; white and Negro workers now enjoy equal status in a growing number of fields of employment; there are in the cities many groups working for the promotion of racial harmony or improvement in the status of Negroes; and residential segregation reduces the proportions of the problem of integration. On the other hand, so far as racial integration in the schools is concerned, W. D. Workman, Jr., makes it abundantly clear that the Deep South will be a very tough nut to crack. So far, at least, practically nothing has happened there by way of compliance with the Court decision, and a great deal has occurred to frustrate the movement toward integration. Indeed, he feels that one of the most tragic developments in the South has been the quiet exodus of the moderates from the debate on this question. The extremists have taken over.

Other contributors to this volume fill in the story of Southern resistance. Thus during the three years under observation, Southern legislatures adopted at least 136 new measures designed to delay or prevent desegregation of the schools. These include such devices as pupil placement laws (in at least eight states); the authorization of the abolition of the public schools (in six states); financial aid to students wishing to attend

segregated, private schools if public schools are closed (in four states); discouragement of court attacks on segregation laws (in four states); resolutions of interposition or nullification (in all states); and miscellaneous statutes affecting compulsory attendance, teacher tenure, transportation, and use of funds for desegregated education. Pupil assignment seems to have emerged as the focal point of legislative resistance to the Court decision.

In short, *With All Deliberate Speed* is a superb brief summary of what has happened since the Supreme Court decreed that segregated education in the public schools cannot be squared with the command of the Constitution that all persons in this country are entitled to the equal protection of the laws. The law has been pronounced by the highest court of the land, and it is now perfectly clear what the law on this subject requires, but it will take time, and much travail, before integration is squared with the conscience of all Americans. All three books under review indicate that the integration fight has really just begun. It will be with us for a long, long time. Certainly now is the time for all good men to come to the aid of their principles.

DAVID FELLMAN

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Mental Health in College and University, by Dana Farnsworth. Cambridge, Harvard University Press, 1957. ix + 244 pp. \$5.00.

For the past several years Dr. Farnsworth, Director of University Health Services at Harvard, has been our most eloquent spokesman in clarifying the contribution which psychiatry can make to the field of college health service. Credit for the fact that by 1947 five hundred fifty psychiatrists were engaged in part-time consulting work with college health services and twenty-five psychiatrists were engaged in full-time college health work is, in substantial measure, due to a small group of administrators and psy-

chiatrists who have made the need for such workers clear. Dr. Farnsworth belongs to this group and has lately become its principal leader. His book reflects his extensive experience in college health work and his criticism of its present limited and parochial views.

One of the troublesome controversies with respect to mental health services in college has developed because of the insistence of groups of psychiatrists and psychologists that counseling and related activities are the exclusive responsibilities of their professional colleagues. Farnsworth proposes that, "... teaching and counseling are in many respects similar. . . . Therefore, the main body of counseling should be done by teachers, within the framework of teaching and learning. . . . For teachers' protection, however, those situations which require abilities and skills not possessed by the usual faculty member call for more professional consultation. This means that for serious financial, curricular, personal, or psychological problems highly trained personnel should be available when needed." This view is clearly differentiated from such statements as the 1950 report of the Group for the Advancement of Psychiatry, which argued that all counseling except academic advising and the work of deans should be under the supervision of the psychiatric health service.

In effect, Farnsworth redefines mental health and relates it to the broad educational goals of higher education. He proposes that a college "may be said to have good mental health when each person in it begins his life there with an even chance, with no prejudice or discrimination to learn or to combat, when people exhibit basic respect for one another, when attitudes are creative and parental, and when community pressures are aimed toward satisfactions that help the individual but do not harm others." His emphasis on the qualities of the college community implies purposes for the college mental health program which are different from more typical definitions of mental health, such as that of Dr. Sol W. Ginsburg: "the ability to

hold a job, have a family, keep out of trouble with the law, and enjoy the usual opportunities for pleasure."

The definitions of mental health which stress the "adjustment" of the individual to the demands of society with little provision for the exercise of individuality or resistance to the deadening pressures toward conformity have rightly been under sharp attack by educators who strive to encourage creativity and originality in students. Farnsworth offers a bridge between the goals of education and the goals of psychiatry.

The author is much more successful in his definition of mental health than he is in relating his concept to the principal task of the college instruction of the student. He discusses the possible contributions of faculty and trained personnel in psychiatry and psychology to the students who are under "stress beyond their strength" and says that "a proper goal of mental health programs in colleges and universities [is] to try to develop the necessary principles throughout the institution in such a way that the majority of the persons concerned would think of them in educational rather than clinical terms." But he fails to describe the ways in which the ideas of history, physics, or literature could (and do) affect the emotional development of students. Without thorough discussion of these relationships, by faculty members and staff of student health services, the goals of mental health programs are likely to remain clinically oriented. It seems clear that many college students are struggling to find new personal guides for the exercise of freedom and for fulfilling the obligations in their lives. The study of the history of Western civilization has much to offer the student who hopes for fresh ideas which he can apply in his newly found adulthood. Yet the teacher of history and the psychiatrist have each failed to help the student make the interpretations from the curriculum to his own life, and have, therefore, denied a principal purpose of liberal education.

Farnsworth states that his goal is to "attempt to convey a point of view about the

interaction of psychiatry and education." He has succeeded in redefining the goals of psychiatric practice in colleges and universities, but falls short of exploring the interaction of psychiatry and education in helping the student achieve emotional and intellectual growth.

W. MAX WISE

Teachers College, Columbia

Social Class and Educational Opportunity, by J. E. Floud, A. H. Halsey, and F. M. Martin. London, William Heinemann, Ltd., 1956. xix + 152 pp. 12s. 6d.

In 1896 the headmaster of the grammar school in Middlesbrough, Yorkshire had the first occasion to report on the social changes occurring in his school. Eight years earlier, fifteen annual scholarships had been endowed to finance free secondary education of the "cleverer boys" from elementary schools. As a result, "quite a new class of boys" was introduced into the school and "caused the exodus of good many others." The school "suffering severely in consequence by the withdrawal of boys who were sent to boarding schools." Yet "the tone of the school [had] not suffered in the least." It was discovered that the newcomers were "drawn from respectable families in which the moral tone would be high." From the perspective of a decade the headmaster felt it justifiable in good conscience to ask the better class parents to "reconcile themselves to what was happening and to recognize the advantage of educating the working-classes." One hundred and sixty students "whose mental development in many cases is marvellous" have enriched the population of his school as a result of the innovation.

One thing only continued to dampen his enthusiasm:

I cannot forbear expressing my deep regret [he wrote] that no suitable careers appear open to these youths. Up to, say, 17, they receive an education well fitted to modern requirements . . . [but] we have no means of placing them in business or sending them forward to a university—and in far too many instances, after wait-

ing—and deteriorating—for months, they are glad to fall in with situations far below their merits. I look upon this as so much national loss and waste of ability, and although it is not my province to indicate any means of cure, yet I am convinced that something will have to be done to utilize for our country's benefit—if only to hold our own in competition with the foreigner—those abundant stores of mental power which at present are so neglected.

More than sixty years have passed since these words were written. "Yet, as the book under review—and from which these words are quoted (pp. 22-24)—indicates, the problems of English education remain essentially the same. On one side, to be sure, excellent and continuous efforts have been made to discover and promote talent irrespective of social class. On the other side, however, the English seem unwilling or unable to follow through this widening of opportunity by an effective relaxation of old social and cultural rigidities. As a result, all types of talent continue to be utilized only in a one-sided manner. "The continual protests that the secondary schools were producing a nation of clerks were made in vain" (p. xv).

The Floud, Halsey, and Martin study is an offshoot of a wider inquiry into the problems of social class conducted at the London School of Economics.¹ It sets itself the task of testing the effectiveness of the latest moves toward equality of educational opportunity in England symbolized by the Butler act of 1944, and by the intellectual selection of English children at the age of eleven for grammar, technical and modern schools. In the pursuit of this aim the authors have conducted research in two communities: (1) a division of Hertfordshire in

the South of England; (2) the borough of Middlesbrough in the North. These educational "catchment areas" were roughly matched in population but differed in their class composition, the first being of a more professional, the second of a more purely working-class character.

The aim of the authors was to secure samples large enough to allow for significant results and different enough to provide a picture of educational selection under favorable and unfavorable conditions. It is in this setting that a thorough examination of the present school population in respect to its social class background, and measured intelligence, was made. The findings were then compared with prewar selection to secondary schools and the postwar changes were analyzed in terms of home conditions. The excellent summaries of conclusions provided by the authors throughout their text make it possible to illustrate the outcome largely in their own words.

The results substantiate fully the qualitative notions about the effect of the selective examination given to children eleven plus years of age. In terms of measured intelligence the schools seem to have succeeded in providing for almost all outstanding talent. "In London in 1933-34, . . . it was found that less than one quarter of the children with an IQ of 130 or more, whose fathers were unskilled workers, and only about one third of those whose parents were skilled workers went to secondary schools" (p. 34). By contrast (in this case in terms of an IQ of about 114 or over) "in 1952 virtually the full quota of boys with the necessary minimum intellectual qualification was admitted from every social class to grammar schools" (p. 51). If equality of educational opportunity means only the discovery at the threshold of secondary schools of people with above average general intelligence, then English postwar reforms have already come within sight of reasonable achievement of this objective. This finding seems to be particularly relevant to areas in which the population was more saturated by professional families and

¹Other writings related to this inquiry include *Social Mobility in Britain*, edited by D. Glass (London, Routledge and Kegan Paul, 1955); *Parity and Prestige in English Secondary Education*, by O. Banks (London, Routledge and Kegan Paul, 1955); *The School Teachers*, by Asher Tropp (London, Heinemann, 1956). The argument of the book under review, which is a continuing inquiry, is carried one step further in "Intelligence Tests and Selection for Secondary Schools," by J. E. Floud and A. H. Halsey, in *The British Journal of Sociology*, March 1957.

hence fraught with more competition and potentialities for abuse. In Hertfordshire the postwar grammar school entry represents a real equalization of advantage as compared with the prewar period. In Middlesbrough, where the composition of the population was more consistently working class, the new process of intellectual selection had proved to be a mere continuation of the prewar system of granting free places in grammar schools. In working class communities the provision of opportunities to outstanding intellectual talent from the working class began long before the 1944 legislation.

But, as the authors are quick to point out, the full upward promotion of outstanding intelligence does not settle the pressing questions of the more equalitarian role of education. "The problem of inequality of educational opportunity is not thereby disposed of" (p. 143). When checked for class background of entrants equitable promotion of measured intelligence merely points to the fact that the problems of cultural equality are not solved by identification of academic acumen. Such reform has an overall effect of benefiting more the middle classes by giving to their children free, the education for which they previously had to pay. It means relatively less to the working class, the historical neglect of which originated the whole movement. It would seem that selection for talent has, indeed, revolutionized the composition of the grammar school population by introducing, especially in predominantly middle class areas, a substantial percentage of children from working-class homes. But in terms of the whole working class population:

... the likelihood that a working class boy will reach a grammar school is not notably greater today despite all the changes, than it was before 1945. Rather less than 10 percent of working class boys reaching the age of 11 in the years 1931-41 entered selective secondary schools. In 1953 in South West Hertfordshire the proportion was 15.5 percent; and in Middlesbrough, 12 percent. . . . In general the sons of manual workers had a chance below the average, and the sons of nonmanual workers a chance above the average, of being selected for grammar

schools. The sons of clerks had four or more times as good a chance as the sons of unskilled manual workers, and two to three times the chance of sons of skilled workers. The difference in chances at the extremes of the occupational scale was still greater. [pp. 33, 42.]

Furthermore, the actual selection for upper class status has only been shifted by the eleven plus selection from the gate of the secondary school to the gate of the university. There is evidence that working class youth progressively lose much of the advantage of admission into grammar schools by early leaving and restricted entry into the universities.

Thus the different "life chances" of boys at grammar school entrance vary according to their class background even though they "can be explained almost entirely in terms of the unequal distribution of measured intelligence" (p. 58). If one is critical of a class system based on hereditary socioeconomic and educational advantage, a mere switch to early selection on the basis of intelligence represents a poor educational reform. Intelligence ratings vary more widely within each social class than between classes. But since "they are known to be largely an acquired characteristic" (p. 65) they tend even under most scrupulously objective methods of selection to reward those already better socially and economically endowed. The authors devote a special section to these reinforcing social influences. They show the adverse relationship between large family size and educational opportunity. They point out that "purely material conditions at home still differentiated the successful from the unsuccessful children even at the same social level." They correlate low class status with less parental ambition and less encouragement of the education of their children; and they observe the persisting "traditional association between poor homes and poor schools" (p. 145). All these social influences either cause or must be added to the adverse intelligence performance. From the standpoint of the individual welfare of all even the strictest selection by ability is no solution whatsoever.

Even from the standpoint of the welfare

of the community, selection by ability is of limited usefulness. If it occurs in a hierarchical society it merely furnishes a greater number of the "best" academically trained people for professional and political posts of great responsibility. But the solution of this problem is accompanied by a host of new problems. In England it has brought into being "the frustration of an earnest and ambitious body of parents" (p. 27). On one hand their search for private grammar school places has greatly strengthened the position of this socially most divisive sector of English society. On the other hand their disdain for the "failures" in the modern schools has greatly handicapped the development of the most vital and hopeful form of mass education. On one side, as a result of the system, young children are haunted by the specter of the forthcoming examinations and turned into bitter anti-intellectuals by a school selection that brands them more painfully than any erstwhile socioeconomic injustice. On the other side, those who succeed often find themselves forced by the dictates of upper class culture to scrap their family allegiances, thus creating new areas of tension. All this is further aggravated by the fact that the number of grammar school places available varies from county to county not in relation to ability but in relation to economic and historical accident, and by the fact that the varying birthrate from year to year produces different quotas of qualified children, thus making annual opportunities unequal. Most significant of all perhaps, the single ladder of success continues to place exclusive social value upon intellectual preparation for white collar occupations, seriously jeopardizing the nation's effort to raise the status of technological education and failing to galvanize the masses, more and more accustomed to the security of the welfare state, into actively constructive social and economic participation.

These are the many pitfalls of a system which boasts near perfection in selection by ability. One ought to consider whether their enormity does not render the very effort of its creation a sheer waste. In this sense the

Floud, Halsey and Martin book may serve as a timely warning to those Americans who press for the reversal of the old established educational comprehensive traditions. Between the neglect or even discouragement of outstanding academic talent with which the schools are now charged and the perfectly operating but equally harmful system of clear-cut intellectual selection there must be several compromise solutions vastly superior to the two polarities. If only we knew how to combine the least "typing" of children and the greatest flexibility and variety of offerings with the individual inculcation of the vision of excellence, we might be spared the attacks of those who look in vain for educational salvation in shoddy shortcuts and false panaceas.

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The Teaching of Mathematics, by the Incorporated Association of Assistant Masters in Secondary Schools. New York, Cambridge University Press, 1957. ix + 231 pp. \$3.00.

Even before the furor resulting from the recent Russian advances in science, professional groups in the United States at the graduate, undergraduate, and secondary levels had appointed committees to study programs in science and mathematics. There are four of these whose work with respect to mathematics is particularly important: (1) Committee on the Undergraduate Mathematics Program (commonly referred to as CUMP) of the Mathematical Association of America; (2) Commission on Mathematics of the College Entrance Examination Board, referred to as the Commission; (3) University of Illinois Committee on Secondary Mathematics, commonly referred to as the UICSM Mathematics Project; and (4) the Curriculum Committee of the National Council of Teachers of Mathematics. From the available reports of these committees, a reader obtains uniformly an air of dissatisfaction

with present programs in mathematics, an idea that the gap between graduate level mathematics and secondary and undergraduate mathematics needs to be narrowed, and an expression of a desire to do a better job of teaching mathematics so that people in the social sciences and the life sciences will find it usable.

So it was with great anticipation that the reviewer read the report by the assistant masters of mathematics in England's secondary schools, whose programs are comparable to our college preparatory programs. Judging by this report, a reader can only conclude the English are unruffled. The report shows more concern with examinations of various sorts than with modern mathematics or modern science. And yet, it is comforting to read a serious, honest discussion of classroom problems in teaching mathematics without having to contend with the usual anxieties resulting from sputniks and shortages of engineers and scientists.

After noting that "the emphasis is increasingly on the student rather than on the subject," Chapter 1 continues with general remarks concerning mathematics, its aims, and the influence of psychological research on classroom methods. That the "historic roots of mathematics lie deep in problems arising in the physical world" is a fact that all too many teachers lose sight of when they approach a topic in mathematics. It is heartening to hear an echo of what one has himself tried to teach, "precision of reasoning need not be opposed to the use of imagination and intuition." Many will read with a wry grin of understanding: "The notable changes in the education of young children which have taken place in the past forty years as a result of how children learn have, as yet, had comparatively little effect on education at the secondary level." And as the reviewer read, "What is essential is that this drill be related to some purpose which is significant to the pupil," he could not help but feel he had been through this before! The chapter concludes with some remarks on classroom practice. If only

each mathematics teacher would remember that "a lesson should begin with a challenge; it should then devise a method or a tool, and finally exhibit the use of this tool in other fields," overnight there would be a revolutionary change in the learning of mathematics by students.

Chapter 2 is a resumé of what is taught in elementary school arithmetic in England. American readers will find the chapter interesting primarily from the point of view of grade placement of topics and difference in algorisms used. As we do in this country, an appeal is made to research to justify the choice of one algorism over another. Is it not strange that research on the same topic in two different countries should result in two different conclusions?

The syllabuses presented in Chapter 3 for the first five years of a secondary school contain a grade-by-grade description of courses that is quite different from our own. Essentially, the difference results from carrying on arithmetic, algebra, and geometry, for example, each year in parallel sequences. At the end of five years, both groups of students would be at about the same level in terms of mathematical knowledge. In view of our shortage of capable mathematics teachers and Soviet teacher education as described in *Education in the USSR* of the U. S. Office of Education, the following comment indicates that England, too, has come to the same conclusion as others: "The period from 1950 onwards is likely to see the disappearance from secondary education of the most highly qualified mathematicians graduating from our universities, simply because the advance of mathematical knowledge and technique has created alternative occupations for them. Indeed, the advance of knowledge, with the corresponding advance in the standard of university work for those specializing in mathematics, brings with it the paradox that those now qualifying with the highest qualifications in mathematics may thereby be gravely handicapped for teaching mathematics to children—and especially to those children who, lacking mathematical genius,

are most in need of sympathetic teaching." This comment on page 56 in Chapter 4 highlights an elaboration of the characteristics of a mathematics teacher and his work with children in a mathematics classroom. Clearly, the masters have come to recognize that there is a professional sort of training in subject matter for a mathematics teacher that is important for him if he is to work effectively in a classroom.

American readers will note with much interest—and enthusiasm if they are mathematics teachers—that the report recommends dividing a school into mathematical "sets." The reasons given are the same as those advanced in this country, but the language used is so sober, so common sense in tone that somehow they seem more cogent. In view of our respect for the results of English education, the fact that only 1 to 1½ hours of homework in mathematics per week is the typical practice will surprise many. A school device that the reviewer long has recommended is also mentioned. That is, that a school ought to have a "definite homework timetable throughout the main school [in order that one homework assignment does not have] to compete with a large number of other assignments."

Chapter 5 achieves interest only in that a reader appreciates that people close to classroom situations are doing the writing. The methods for teaching certain specific topics of the syllabuses are not very different from good classroom practices that exist in this country. Those mathematics teachers who continually complain about the mathematical shortcomings of their students might read with some chagrin the firm conviction of the English masters that "it is remarkable how little essential knowledge is required as a foundation for mathematical education and how easily deficiencies in earlier work may be remedied by skillful teaching."

Of the remaining chapters, which consider the problem of sixth form work in mathematics, there is only one that is of more than passing interest. It is Chapter 8, "The Mathematics Classroom." So many of

the discussions of a mathematics classroom that appear in our professional publications are of the out-of-this-world variety. So much so that no community is willing to spend the funds necessary for such a room in considering the construction of a new school building. Here, however, are details for arrangement of the room's equipment, suggestions of ways to use the room, and arguments for their justification that are fresh. Study of this chapter might influence school architects and school authorities to consider more seriously a center for mathematics activity in a school.

The secondary-school assistant masters do not recommend a "crash program" of mathematics instruction. No, they urge more attention ought to be given to the student and more attention paid to motivating him in his study of mathematics. Is that not good? They suggest ways for a mathematics master to improve his classroom practices, through examples and analysis of them. Frankly confessing that there is little evidence to support their view, still they deprecate the extreme formality of some classroom instruction. Communicated to a reader is their deep faith in the possibility of continually improving the secondary school program in mathematics and its teaching.

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The Adolescent Views Himself, by Ruth Strang. New York, McGraw-Hill Book Co., 1957. xiv + 581 pp. \$7.95.

Before one reads this book it would be well to review the pros and cons of the use of personal documents presented in Gordon Allport's Social Science Research Council monograph entitled *The Use of Personal Documents in Psychological Science*. Having reviewed them he should keep them very much in mind while he reads the excerpts from adolescents' compositions in this book which purport to reveal how they view themselves. If one is willing to use

personal documents, as the author does, in an accepting and almost completely uncritical manner he will like this book. If, however, he believes that data from such documents must be supported by evidence obtained from many other sources he will not feel that the adolescent writers have fully revealed themselves. And after reading so many of the excerpts from the compositions written by the adolescents he may feel as the author says one of them felt about writing them: "If I have to write another composition about adolescence, I'll scream." (p. 10.)

In the first hundred pages of this book the author attempts to describe how adolescents view themselves and their world. Part II, which constitutes almost half of the volume, is concerned largely with adolescent perceptions and attainment of ten developmental tasks or goals. Favorable conditions for students' learning and guidance are outlined in the 75 pages of Part III. Throughout all three parts the usual method of presentation of the topics under consideration is one of general discussion and comment followed by brief statements about previous research. Illustrative quotations from compositions written by adolescents are sprinkled liberally throughout the comments, discussions and statements.

The general discussion and comments about adolescent growth and development cover the very familiar ground that most writers about adolescence have described many times. Nothing new is added. It is the addition of the voluminous excerpts from the adolescent compositions that makes this book different from many others. Since they are the essence of the contribution of this volume one wishes that the author had given more adequate descriptions of their sources, the way that they were obtained, the reasons for selecting the quoted excerpts, and the extent to which the selected ones are typical. There are few tables of frequencies about such matters, so the reader must rely largely upon casual references to compositions written by, for example, "three seventh grade classes in a small town in Connecticut,"

"seventh grade boys on farms in rural communities in the South," "an eighth grade class in a seminary," "a senior class in a mill town." With such inadequate descriptions of the backgrounds of the writers the reader cannot evaluate the results. It seems possible that another reader of the same compositions might have chosen other quotes to illustrate a completely contradictory conception of adolescents' views about themselves. By selecting paragraphs from the pens of many writers one can defend almost any interpretation of their self concepts that he proposes.

Many topics are discussed in the relatively little space that remains in this volume after the quotations from adolescents are covered. The discussions are so brief that they cannot bring much meaning to a reader. Under the heading of "Client-Centered Counseling," for example, there is a paragraph of fifteen lines of which seven are quotations from adolescents. The heading "Genesis and Development of Values" is followed by only eleven lines of comment. "Moral and Spiritual Values" get only one half page of consideration and another half of quotations. "Varieties of Adolescent Love Experiences" are presented in three pages of comment and three of quotes. Readers who have not studied such topics will not be enlightened by such brief considerations, while those who have pondered long on them may be disturbed by what seems to be desultory treatment of major issues.

Implications of the adolescent's view of himself for his treatment by parents, teachers and the few counselors who "work with individual cases that are too complex and time consuming for teacher-counselors to handle," are given in lists of things to do, and in hortatory isolated paragraphs and sentences throughout the book. The general implication is that all adults ought to learn more about adolescents' views of themselves. Knowing them they should make adaptations so that they can help the adolescents to reach their ten developmental goals. Adults are told to view adolescence as an opportunity, not a calamity.

It is difficult to determine the uses to which this overpriced book should be put. Perhaps the reading of it by teachers, counselors, and parents will act as a partial antidote to the overly structured approach to the study of youth that has currently become the way to appear scientifically respectable. It does not present enough dis-

cussion on the topics to justify its use as a textbook. It may find its greatest use as part of a course unit on the use of personal documents to get at the inner half of an adolescent that is not apparent to those who observe him in his daily activities.

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Books Received for Review

American Association of School Administrators, *The High School in a Changing World*. Washington, National Education Association, 1958. 383 pp. \$5.00.

Baron, Denis, and Harold W. Bernard, *Evaluation Techniques for Classroom Teachers*. New York, McGraw-Hill, 1958. 297 pp. \$5.50.

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